4.0 RECIRCULATED DRAFT EIR IMPACT SECTIONS

After circulation of DEIR 2005, changes were made to elements of the proposed project that required additional analysis pursuant to State CEQA Guidelines. This document, the Recirculated Draft EIR, contains a revised project description section, and additional environmental analysis for the proposed project. Two impact sections of DEIR 2005 have been revised and are being recirculated for public review in their entirety, the Hazards and Hazardous Materials section, and the Public Services and Utilities section. These sections are included in Chapter 4.0. Additional new or updated information is included for the proposed off-site open space (Chapter 5.0) and for other CEQA topics (Chapter 6.0).

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FIGURES

4.6 HAZARDS AND HAZARDOUS MATERIALS

This section addresses potential hazardous materials impacts to human health and the environment at the project site as a result of implementation of the proposed project. The information contained in this section is based on the *Phase I Environmental Site Assessment with Preliminary Methane Soil Gas and Air Sampling* report prepared by MISSION Geoscience, Inc. (MISSION) (Appendix F of DEIR 2005) and the *Phase I Environmental Site Assessment, Two Vacant Parcels Associated with the Proposed Home Depot Development*, prepared by GeoSyntec Consultants (GeoSyntec) (Appendix B of this Recirculated EIR).

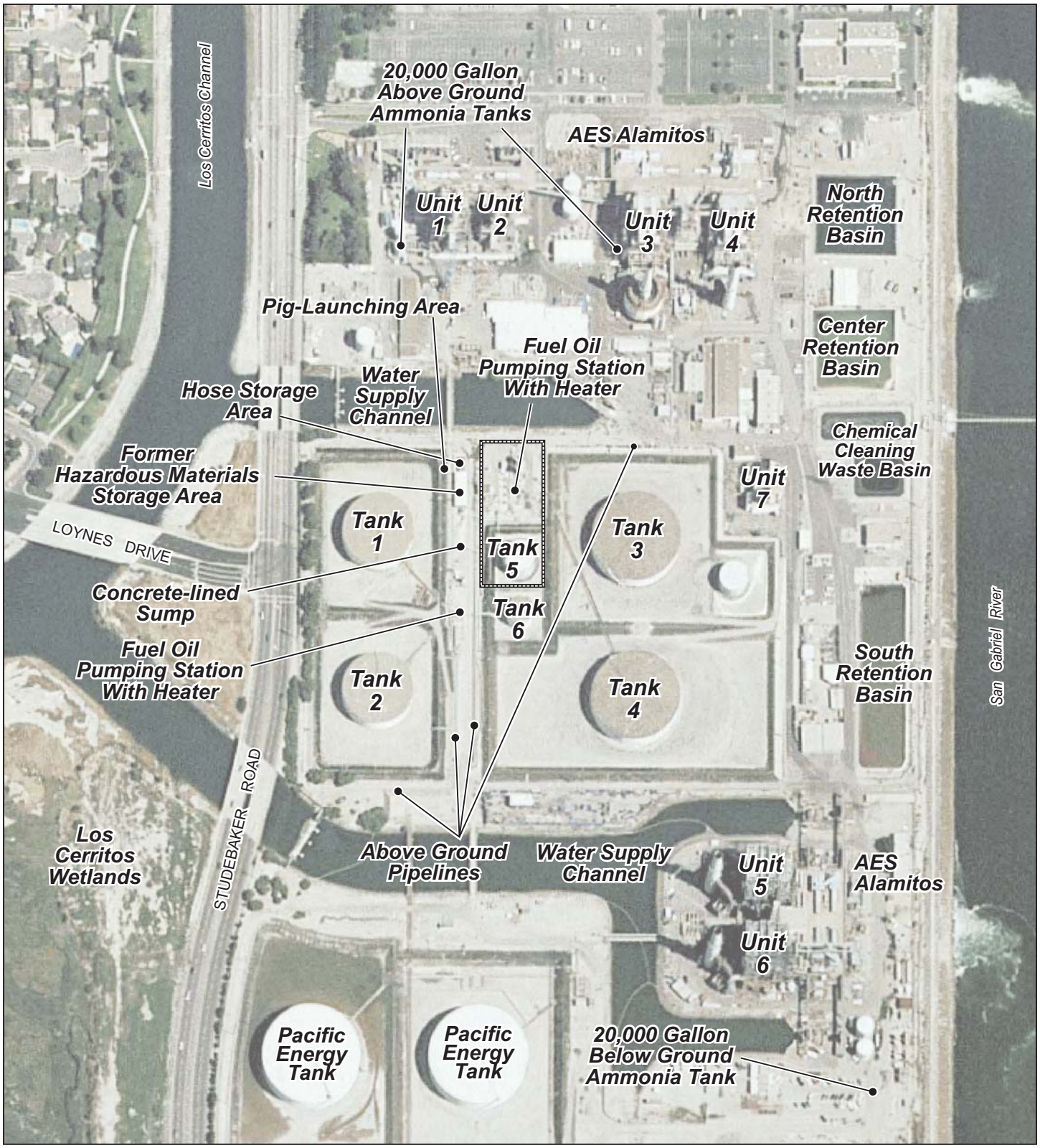
4.6.1 EXISTING ENVIRONMENTAL SETTING

The proposed Home Depot site is an aboveground storage tank (AST) farm and is surrounded by seven units and associated support facilities that constitute the Alamitos Generating Station (AGS), a natural gas fired steam plant that generates electrical energy. AGS was formerly owned by Southern California Edison (SCE), but was sold to AES Alamitos, LLC (AES) as part of deregulation activities. The project site is owned by Studebaker LB, LLC. The site also contains pumping and distribution equipment and pipelines for petroleum-based fuel distribution. Another AST farm, connected to the site via pipelines, is located south of the site. A former hazardous materials storage facility is located adjacent to the hose house in the northern portion of the project site and west of the existing pumping and distribution facility (Figure 4.6.1).

Aboveground Storage Tanks

The tank farm consists of four large and two small ASTs and associated pipelines and pumping facilities. The four large ASTs have storage capacities of approximately 5.9 million gallons (Tank Nos. 1 and 2) and 9.4 million gallons (Tank Nos. 3 and 4). The large tanks reportedly contain No. 6 fuel oil and the smaller tanks contain cutter stock fuel oil. The capacities of each of the two smaller tanks are 1.2 million gallons and 840,000 gallons, respectively. Each of the tanks is enclosed by an approximate 10-foot-high earthen containment berm. The tanks are constructed of steel, with insulation between the steel and the outer fiberglass shell. The ground surface around the tanks is paved with asphalt. Along the inner side of the berms are drainage systems and containment area gate valves. During the site visit on January 27, 2004, the tanks and the pipeline directly connected to the tanks were observed to be inactive, partly damaged, and exposing the inner insulation materials. The asphalt-paved surfaces around the tanks are deteriorated, exposing the gravel base. According to the property owner, Tank Nos. 1–3 are empty, and Tank No. 4 contains approximately 30 inches of water and oil that was transferred from Tank Nos. 1–3.[1] An empty concrete-lined sump area was noted east of Tank No. 1.

[1] Communication with David Mackenbach, Studebaker LB, LLC, January 27, 2004.



LSA

FIGURE 4.6.1

LEGEND

Tank 5 and Equipment to Remain

Some Locations Approximate

0 150 300 FEET

0 45.7 91.5 METERS

Home Depot East Long Beach

Existing Facilities

SOURCES: Eagle Aerial; URS Corp. (Risk Management Plan); Mission Geoscience (Phase I Report)

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As reported in the Phase I Report (Appendix F of DEIR 2005), a review of readily available environmental reports provided by the project developer indicated that shallow soils beneath the on-site ASTs have been impacted by petroleum hydrocarbons (No. 6 fuel oil). Arsenic was also reported to have impacted the shallow soils around Tank Nos. 1, 2, and 4.

Methane Soil Gas and Air Sampling

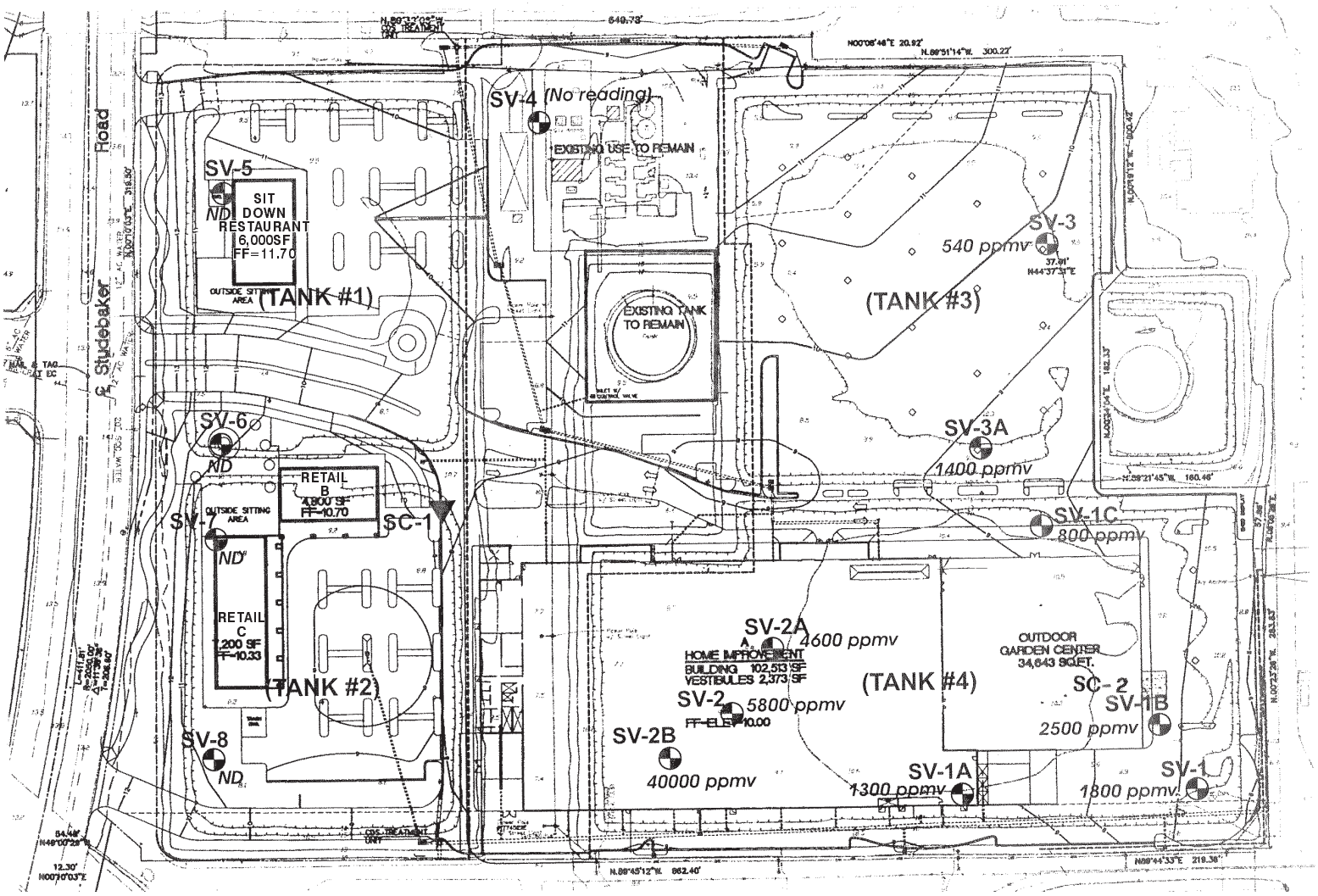
MISSION conducted a preliminary methane soil gas investigation at the site on March 1, 2004. Methane soil gas concentrations were detected within the Tank No. 4 area at concentrations as high as 40,000 ppm in air by volume (Figure 4.6.2). This level of concentration exceeds the current regulatory threshold of 5,000 ppm; therefore, MISSION concluded that the presence of methane in the shallow soils of the areas investigated constitutes a potential health and safety hazard for the project site.

MISSION collected two on-site and one off-site air samples to determine air quality at the project site and vicinity on March 1, 2004. These samples were analyzed for volatile organic compounds (VOCs) and methane. None of the target volatile constituents or methane was detected at concentrations equal to or above their respective reporting detection limits in the air samples collected (Appendix F of the Phase I report). A review of South Coast Air Quality Management District (SCAQMD) records (Appendix B of the Phase I report) indicated that regular facility inspections and air emissions surveillance by SCAQMD are on-going in accordance with permit requirements. Because the air samples collected by MISSION in March 2004 did not detect VOCs or methane and AGS is subject to regular inspections by SCAQMD, MISSION concluded that air quality at the project site is not currently considered an environmental concern for the project site.

Polychlorinated Biphenyls (PCBs)

Standard equipment generally suspected of potentially containing PCBs includes industrial-capacity transformers, fluorescent light ballasts, and oil-cooled machinery. All PCB-designated transformers were required to be replaced with non PCB-designated transformers after PCBs were designated as a carcinogen by the Environmental Protection Agency (EPA) in 1977. Transformers are currently classified as PCB-containing if their cooling oils contain greater than 50 milligrams per liter total PCBs.

During MISSION's site visit on January 27, 2004, four concrete pad-mounted transformers were observed, two of which were inactive. No indications of leaks or spills were observed within the vicinity of the transformers during the site visit. Three of the transformers are located within the pumping facility along the northern portion of the project site and would remain in operation. The fourth transformer was observed south of the former hazardous materials storage area. Because the transformers on the project site are suspected to contain PCB-containing oil, and due to the possibility of past leaks or spills, these transformers are considered a potential environmental concern until proven otherwise.



LSA

N

0 75 150
FEET

LEGEND:

SV-8 Approx. MISSION's soil vapor probe location indicating methane concentration in ppmv.
ppmv=parts per million of gas volume.
ND=methane is not detected at concentration equal to or above method reporting limit.

SC-1 Approx. Summa canister air sample location.

FIGURE 4.6.2

Home Depot East Long Beach
Methane Concentrations

SOURCE: Madison Civil Engineering/Land Surveying; Mission Geoscience (Phase I Report)

I:\CLB430A\G\Methane Concentrations.cdr (5/16/06)

Asbestos-Containing Materials (ACMs)

MISSION observed exposed suspected ACMs between the inner steel and the outer fiberglass liners of the tanks and around the associated aboveground piping. Warning signs were observed at the project site regarding the presence of ACMs during the site visit.

Lead-Based Paint (LBP)

Buildings and structures constructed prior to 1978 are presumed to contain LBP. LBP has potentially been applied to the ASTs, associated equipment, the hazardous materials storage area, and the hose storage room.

Alamitos Generating Station

In 1995, the Department of Toxic Substances Control (DTSC) received a judgment against SCE for storing and treating hazardous waste at AGS (as well as other generating stations in Southern California) for several years in surface impoundments without a hazardous waste facility permit.[1] Since this time, these impoundments have been subject to the requirements of the Resource Conservation and Recovery Act (RCRA; discussed in Section 4.6.2, below) for closure and corrective action under DTSC oversight. As reported in the Phase I report (Appendix F of DEIR 2005) discharges into the surface impoundments (reported under the toxic pits database) ceased as of February 26, 1995.

AES purchased AGS from SCE on May 18, 1998. As reported in the Phase I report (Appendix F of DEIR 2005), three incidents of accidental releases/spills were reported (April 12, 1999; December 6, 1997; and August 20, 1998), consisting of spills of fuel oil, oil, and No. 6 fuel oil, respectively (Appendix B of the Phase I report). Because these spills were reportedly contained and cleaned up, MISSION concluded that they did not represent a recognized environmental concern for the project site.

A June 11, 2002, a Compliance Evaluation Inspection conducted by DTSC staff at AGS did not report any violations.[2] MISSION determined that due to the proximity of the project site to the surface impoundments, there is the potential for groundwater at the site to be contaminated from past releases.

On August 22, 2005, after release of the Home Depot DEIR for public review, DTSC sent a letter to several generating station owners indicating that 11 generating stations formerly owned and operated by SCE, including AGS, are subject to the Final Judgment of Stipulation, mentioned above, for corrective action for past releases of hazardous wastes. The letter states that new landowners acquire liability for needed closure and corrective action. The letter also requests a meeting with owners in order to enter into a Corrective Action Consent Agreement "detailing the activities to be performed and reimbursement for DTSC oversight, site access, ownership changes, the need for land use

[1] Final Judgment Pursuant to Stipulation between DTSC and SCE, February 1, 1995.
[2] DTSC. Southern California Edison Inspection Report. June 11, 2002. (Appendix B of the Phase I report).

covenants for sites that cannot be remediated to unrestricted use, and schedules for investigation and remediation."[1]

AGS utilizes hazardous materials in its day-to-day operations and is regulated by the EPA, SCAQMD, and the Certified Unified Program Agency (CUPA) as well as other agencies. Aqueous ammonia is utilized as a scrubbing agent to reduce nitrous oxide(s) (NOx) emissions to the surrounding air as required by the SCAQMD permit. Three aboveground 20,000-gallon storage tanks provide ammonia for Units 1, 2, 3, and 4. One belowground 20,000-gallon tank provides ammonia for Units 5 and 6.[2] Tank locations are shown in Figure 4.6.1.

Corrective Action for the Proposed Home Depot Site

The project applicant purchased the project site from AES on December 5, 2002. The surface impoundments (basins on Figure 4.6.1) at AGS are not located on the parcel (project site) sold to the project applicant; however, DTSC notified the City by telephone in July 2005 that DTSC retains authority over the corrective action and closure activities on the project site as well as AGS because both sites were once part of the same property. The project applicant is in the process of entering into a Corrective Action Consent Agreement with DTSC in connection with DTSC's oversight of the phased corrective action activities to be conducted by the project applicant at the project site. Corrective action and closure of the AGS are being implemented independently by SCE.

Open Space Site at 7th Street and Silvera Avenue

The proposed open space site is vacant except for wooden sheds (pump houses) and water equipment vaults. The GeoSyntec Phase I report (Appendix C of this Recirculated EIR) stated that hazardous materials, tanks, and waste discharge were not observed at the open space site during the reconnaissance and that no evidence of recognized environmental conditions resulting from historical onsite activities was identified. In addition, GeoSyntec found that there was no evidence that off-site activities had adversely affected the open space site.

4.6.2 REGULATORY REQUIREMENTS

State and Federal

Hazardous Materials. The federal Toxic Substances Control Act (TSCA) of 1976 regulates chemical substances, which are substances and mixtures that might pose unreasonable risks of injury to human health or the environment. TSCA authorizes EPA to require manufacturers to test their chemical products to determine their "toxic effects" and provide this information to EPA for agency review before commercial manufacture is permitted.

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1 DTSC. Notification of Resource Conservation and Recovery Act (RCRA) Requirements for Closure and Corrective Action at the Former Southern California Edison Generating Stations. August 22, 2005.

2 URS Corporation. Risk Management Program, SCR Systems and Aqueous Ammonia Storage Tanks. October 2002.

Businesses that utilize hazardous materials are subject to Emergency Planning and Community Right-to-Know (Proposition 65) requirements as set forth in Title III of the Superfund Amendments and Reauthorization Act (SARA) and the California Waters Bill. These regulations require worker notification of hazardous substances in the workplace. The proposed Home Depot Center, retail businesses, and restaurant are subject to these requirements.

The State Waters Bill (AB 2185, et al.), set forth in the California Health and Safety Code Sections 25500–25545, requires businesses that utilize hazardous materials above certain thresholds to prepare on-site "business plans" for possible emergencies involving those materials and to provide copies of the plans to local emergency response agencies. The business plan must include an Inventory List and an Emergency Action Plan. Minimum thresholds are as follows:

- Liquids: 55 gallons
- Solids: 500 pounds
- Compressed gases: 200 cubic feet (measured at standard temperature and pressure)
- Radioactive: quantities that exceed Nuclear Regulatory Commission thresholds requiring the preparation of emergency plans (10 CFR Parts 30, 40, and 70).

Exemptions from these thresholds include the following:

- Hazardous materials stored as consumer packages for direct distribution to the general public
- Up to 1,000 cubic feet of oxygen, nitrous oxide, and/or nitrogen stored by physicians, dentists, podiatrists, veterinarians, and pharmacists
- Up to 55 gallons of any lubricating oil and up to 275 gallons of all lubricating oil stored by one business

The proposed Home Depot Center would store the quantities and types of hazardous materials typical of a home improvement center. These materials would include: paints, pesticides, solvents, oils, acids, and propane. It is not anticipated that the proposed project would meet the Waters Bill thresholds for storage of hazardous materials.

The Waters Bill requires an administering agency to oversee hazardous materials and waste laws. The CUPA implements program elements either directly or in coordination with affiliated Participating Agencies (PA). The Long Beach Department of Health and Human Services is the CUPA for businesses within the City, including the project site. Business Plans for operations subject to the Waters Bill are reviewed and approved by the CUPA. The CUPA also conducts inspections of these facilities. The Long Beach CUPA has the authority to require business plans for facilities that do not meet the minimum requirements if it determines that CUPA oversight is needed due to the type of facility or location.

Hazardous Waste. Federal and California laws provide for "cradle to grave" regulation of hazardous wastes; i.e, the regulations govern a hazardous waste from its point of generation to its point of disposal at an approved landfill or incinerating facility. The federal hazardous waste law is known as the Resource Conservation and Recovery Act of 1976 (RCRA) (40 CFR 240 et seq.). California has

merged its RCRA authority into ongoing implementation of the State Hazardous Waste Control Law (HWCL), which was initially adopted in 1972 (22 CCR sec 66260.1 et seq.).

The Environmental Protection Agency (EPA) has primary responsibility for implementing RCRA, and the California Department of Toxic Substances Control (DTSC) is the State's lead agency in implementing HWCL and RCRA provisions. California allows county and city health departments and other local agencies to implement certain HWCL provisions regulating hazardous waste generators under terms of Memoranda of Understanding (MOUs) with DTSC.

All RCRA-regulated and California-regulated hazardous waste must be recorded on hazardous waste manifests, with copies sent to DTSC. The manifest is a way of tracking hazardous waste from its inception to its disposal. The project site is subject to these requirements for disposal and transport of hazardous waste. Within its jurisdictional area, the CUPA receives copies of hazardous waste manifests for tracking purposes.

The City of Long Beach Fire Department provides emergency response for spills of hazardous materials or waste and conducts inspections with regard to storage of these substances. Oversight of remediation of soil and groundwater contamination is generally the responsibility of the Long Beach CUPA, the Local Enforcement Agency for State regulations. As mentioned above, DTSC has asserted oversight for remediation of soil and groundwater contamination at the project site. DTSC will consult with the Regional Water Quality Control Board (RWQCB) and the CUPA as necessary.

Aboveground Storage Tanks. In 1989, California adopted the Aboveground Petroleum Storage Act (the AST Act [California Health & Safety Code Section 25270 et seq.]). The AST Act requires facility registration, Spill Prevention Control and Countermeasure (SPCC) plans and, in certain cases, groundwater monitoring. The State Water Resources Control Board (SWRCB) and the RWQCB implement these requirements.

The Long Beach Fire Department is the oversight agency for AST installation and removal at the project site. The Fire Department will consult with DTSC and the CUPA as necessary.

Occupational Safety and Health. The federal Occupational Safety and Health Act of 1970 (OSH Act) (40 CFR 1902–1990) is the principal national law providing for worker safety and right to know. The broad policy goal of the act is "to assure so far as possible every working man and woman in the Nation a safe and healthful working environment." It is implemented by the U.S. Occupational Safety and Health Administration (OSHA), whose responsibilities include developing and promulgating occupational safety and health standards and assuring that these standards are administered and enforced nationwide.

The federal OSH Act allows states to administer OSHA requirements after submitting a State plan. Cal/OSHA administers OSHA standards applicable to private employers within the State, along with additional authority provided by the California Occupational Safety and Health Act of 1973 (State OSH Act) (8 CCR secs. 330-8618). These regulations are applicable to construction workers and prospective employees at the proposed Home Depot Center, retail businesses, and restaurant. Complaints regarding health and safety issues at the project site would be investigated by Cal/OSHA.

Air Quality. The federal Clean Air Act of 1970 (CAA) (40 CFR 50-95, 1400) creates a comprehensive national framework for maintaining and enhancing air quality. Title III of CAA defines hazardous air pollutants (HAPs), provides emission standards, and establishes the Accidental Release Prevention (ARP) program, which is applicable to facilities that meet thresholds for storage of hazardous materials (500–20,000 pounds). The ARP program requires preparation of a Risk Management Plan that includes source registration information, an off-site consequence analysis, a five-year accident history, an emergency response program, and certification of truth and accuracy of submitted information.

California has integrated CAA requirements into its own comprehensive air quality control program. The State version of the ARP is CalARP (California Code of Regulations, Title 19, Division 2, Chapter 4.5). The California Air Resources Board (CARB) has statewide responsibility for administering federal and State requirements. Thirty-five Air Pollution Control Districts (APCDs) and Air Quality Management Districts (AQMDs) issue local rules, regulations, and permits for stationary sources. SCAQMD and the Long Beach CUPA are the enforcement agencies for the project site and vicinity.

AGS is subject to the CalARP because it stores large quantities of aqueous ammonia. The Long Beach CUPA oversees the AGS Risk Management Plan and conducts reviews and approval of updates to the plan. The proposed project would not be subject to the CalARP because it would not store hazardous materials above the thresholds.

Asbestos-Containing Materials. ACM products presently banned are corrugated paper, rollboard, commercial and specialty paper, flooring felt, and new uses of asbestos. Revisions to regulations issued by OSHA (June 30, 1995) require that all thermal system insulation, surfacing materials, and resilient flooring materials installed prior to 1981 be considered “presumed” asbestos-containing materials (PACM) and treated accordingly. In order to rebut the designation as PACM, OSHA requires that these materials be surveyed, sampled, and assessed in accordance with 40 CFR 763 (Asbestos Hazard Emergency Response Act–AHERA).

All asbestos should be removed from structures and disposed of in accordance with local, State, and federal regulations prior to renovation or demolition activities that would affect structures containing asbestos. Release of asbestos into the environment is a violation of several laws, including OSHA, RCRA, the CAA, and the Clean Water Act (CWA). MISSION identified suspect asbestos-containing material at the project site in the form of pipe and tank insulation. No asbestos survey documentation was available for the project site. For the purposes of this analysis, it is assumed that asbestos is present.

The SCAQMD and the City of Long Beach Health Department are the enforcement agencies for the project site.

Lead. Lead has been used in commercial, residential, roadway, and ceramic paint products; in electric batteries and other devices; as a gasoline additive; for weighting, in gunshot; and for other purposes.

It is recognized as toxic to human health and the environment and is widely regulated in the United States. Buildings constructed prior to 1978 are presumed to contain LBP unless proven otherwise, although buildings constructed after 1978 may also contain LBP. Lead is regulated as a "criteria" pollutant under the CAA, which has led to its elimination from automotive fuels. Aerially deposited lead from past use of leaded fuels is a concern in unpaved areas adjacent to highly-traveled roadways. Lead is also regulated as a toxic pollutant under the CWA and the Porter-Cologne Water Quality Control Act as well as under the federal and California safe drinking water acts.

All LBP above regulatory thresholds should be removed from structures and disposed of in accordance with local, State, and federal regulations prior to renovation or demolition activities that would affect structures that contain LBP. Release of LBP into the environment is a violation of several laws, including OSHA, RCRA, the CAA, and the CWA. MISSION identified suspect LBP structures (piping, tanks) at the project site in their Phase I report. For the purposes of this analysis, it is assumed that LBP paint is present.

The SCAQMD and the City of Long Beach Health Department are the enforcement agencies for the project site.

City of Long Beach

There are no specific goals or policies related to hazardous materials in the City's General Plan. The Public Safety Element lists general protection and remedial action goals for general safety hazards and for emergencies. Transport of hazardous materials is deferred to California Department of Transportation (Caltrans) requirements and is specified along designated truck routes. The Public Safety Element indicates that planning efforts should include a buffer for all uses from truck routes to reduce potential impacts from dangerous materials by way of setbacks or natural barriers.

The project is subject to the following chapters of the City of Long Beach Municipal Code with regard to hazardous materials:

Chapter 8.64 Air Pollution. Provides the City with authority to prevent injury or damage to businesses or property due to air pollution.

Chapter 8.85 Underground and Aboveground Storage Tanks. Designates the Long Beach CUPA as the local authority for underground and aboveground storage tank compliance.

Chapter 8.86 Hazardous Materials Release Response Plans and Inventory. Designates the Long Beach CUPA as the local authority to enforce Chapter 6.95 of Division 20 of the California Health & Safety Code.

Chapter 8.87 Hazardous Waste Control. Designates the Long Beach CUPA as the local authority to enforce Chapter 6.5 of Division 20 of the California Health & Safety Code

Chapter 8.88 Hazardous Materials Clean-up. Requires site characterization, site remediation, and initial and final reports for contaminated sites in accordance with State and local laws and regulations (e.g., Hazardous Waste Control Law, Cal OSH Act)

4.6.3 METHODOLOGY

Environmental analysis for this section considers the existing industrial facilities at the site, the existing soil contamination, operation of the adjacent AES facility, potential construction hazards and hazardous materials, and potential hazards and hazardous materials associated with implementation of a Home Depot Center and additional retail/restaurant facilities at the site. Hazards and hazardous materials affecting the site are summarized from compiled information and analyses, including referenced documents/publications and a site-specific *Phase I Environmental Site Assessment with Preliminary Methane Soil Gas and Air Sampling* report prepared for the project (MISSION 2004). This report is provided in Appendix F of the DEIR.

4.6.4 THRESHOLDS OF SIGNIFICANCE

Thresholds for hazards impacts are based on Appendix G of the State CEQA Guidelines, as adapted to the circumstances of this project. The proposed project would have a significant impact on the environment if any of the following occur:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment

4.6.5 IMPACTS AND MITIGATION MEASURES

Less than Significant Impacts

None were identified.

Potentially Significant Impacts

There is the potential for significant hazardous substances impacts with implementation of the project during the construction and operation phases of the project. These potential impacts are discussed in detail below.

Construction. The construction phase for the proposed project includes demolition, soil sampling, and contaminated soil or groundwater removal/remediation if required, as well as site preparation/grading. The proposed Home Depot site was formerly part of AGS, which has been listed as a hazardous waste site pursuant to Government Code Section 65962.5

Project construction includes the following components:

- Removal of residue from Tank No. 4
- Demolition and removal of Tank Nos. 1–4 and 6
- Removal of underground and aboveground pipelines and equipment associated with these tanks
- Demolition of the hose storage area and the hazardous materials storage area
- Reconstruction and resurfacing of the berm around Tank No. 5
- Construction of a block wall around Tank No. 5 and a fence around its equipment
- Relocation of the aboveground pipelines connecting Tank No. 5 and the southern Pacific Energy tanks to underground vaults.

As discussed in Section 4.6.1, DTSC will have oversight authority over remediation at the project site. DTSC will consult with RWQCB and local agencies as necessary. For instance, RWQCB may be consulted regarding groundwater issues, and the Long Beach Fire Department will oversee removal of the ASTs and associated pipelines.

The process for site remediaton will be in accordance with DTSC's model the Scope of Work for a RCRA Facility Investigation (RFI) (refer to Appendix E). The components of an RFI include a:

- Current Conditions Report
- RCRA Facility Investigation Workplan
- RCRA Facility Investigation Report
- Health and Safety Plan

The scope of work for the Current Conditions Report is extensive. DTSC has the authority to modify the RFI process in accordance with the findings of the Current Conditions Report. DTSC must approve each step of the RFI before the process can continue.

As required under RCRA, DTSC requires a Consent Agreement between the project applicant (property owner) and DTSC before any equipment removal or remediation of the site can take place. DTSC also reserves the right to place a land use covenant on the property in case the project site cannot be remediated to an unrestricted use. These requirements are included in Mitigation Measures 4.6.1 and 4.6.2, respectively.

As discussed in Section 4.6.1, Tank Nos. 1–3 are reportedly empty, and Tank No. 4 reportedly contains approximately 30 inches of water and oil that was transferred from Tank Nos. 1–3. In addition, shallow soils below the tanks have been impacted by petroleum hydrocarbons (No. 6 fuel oil) and arsenic. Improper handling of the ASTs, pipeline conveyance systems, and their contents could cause potential impacts to the on-site and off-site environment. However, AST removal is subject to specific local, State, and federal regulations, and compliance with these regulations is considered adequate to address potential impacts from AST and pipeline removal activities.

Therefore, implementation of Mitigation Measure 4.6.3 would reduce potential impacts from tank removal to less than significant levels.

Other potential hazardous substances at the project site include asbestos, lead-based paint, and PCBs in structures proposed for demolition. Compliance with local, State, and federal regulations regarding the handling and disposal of these hazardous substances is considered adequate to reduce potential impacts to less than significant levels. Therefore, implementation of Mitigation Measure 4.6.4 would reduce potential impacts from asbestos, lead, and PCBs to less than significant levels.

Tank No. 5 and supporting equipment would remain in a 1.1-acre area in the northern portion of the site as part of the proposed project (Figure 4.6.1). Since construction activities would involve construction of a block wall and fence in this area, there is the potential to disturb these facilities and cause a spill or leak. In addition, relocation of the existing aboveground pipelines to underground vaults may result in leaks or spills. Compliance with local, State, and federal regulations regarding emergency response and spill containment is considered adequate to address these potential hazards. Therefore, implementation of Mitigation Measure 4.6.5 would reduce impacts from the disturbance or movement of existing on-site facilities to less than significant levels.

The extent of petroleum hydrocarbon and metals contamination from operation of the ASTs and support facilities is unknown, because it cannot be adequately assessed until the tanks are removed. Completion of a detailed soils and groundwater investigation and removal and disposal of any contaminated soils and/or groundwater is required to prevent significant impacts to human health or the environment. As discussed in 4.6.2, there are numerous federal and State regulations that govern the generation, handling, and disposal of hazardous materials. The purpose of these regulations is to protect human health and the environment from adverse impacts associated with hazardous materials. Remediation would be overseen by DTSC with CUPA and RWQCB coordination as necessary. After review of the DEIR, DTSC has determined that the soil investigation associated with the ASTs and pipelines should include testing for VOCs, semi-volatile organic compounds (SVOCs), polyaromatic hydrocarbons (PAHs), metals, asbestos, and PCBs.[1] Under State and federal law, DTSC has the authority to oversee and direct remediation at contaminated sites. Therefore, implementation of Mitigation Measures 4.6.1 and 4.6.6, which require adherence to DTSC requirements under State and federal law, would reduce potential impacts from contaminated soils and groundwater associated with the ASTs and support facilities to less than significant levels.

Methane was found in shallow soils above regulatory levels during a preliminary methane soil gas investigation (Appendix F of DEIR 2005). In order to delineate methane concentrations for the proposed project, a methane soil gas investigation is necessary after rough grading and prior to building construction and utility installation. This method of testing is appropriate because methane concentrations and methane migration would likely change during grading and site preparation. The preliminary methane testing did not produce results for the post-grading condition, which is the condition for which remediation or engineering protection is required. Compliance with local, State, and federal regulations is considered adequate to address methane hazards. Therefore, implementation

[1] DTSC. Clarification of Comments on the Draft Environmental Impact Report for the Proposed Home Depot Development located at 400 Studebaker Road, Long Beach, California, Alamitos Generating Station Tank Farm. Letter from Penny Nakashima, P.G. Senior Hazardous Subtances Scientist to Angela Reynolds, Environmental Officer, City of Long Beach. September 15, 2005.

of Mitigation Measures 4.2.1 and 4.6.7 would reduce potential methane impacts to less than significant levels.

Due to methane occurrence, undocumented fill soils, and historical use of the site, there is the potential for additional hazards to be encountered during rough grading and excavation activities. A Soil and Air Monitoring Program, which includes a Health and Safety Plan, is required to prevent significant impacts to human health and the environment during soil disturbance activities. The monitoring program will address all known and potential contaminants on site, including methane. Compliance with local, State, and federal regulations regarding the handling and disposal of hazardous soils or groundwater, as outlined in the Soil and Air Monitoring Program (Mitigation Measure 4.6.8), would reduce potential impacts from these elements to less than significant levels.

Project construction would involve the routine use of hazardous materials such as fuels, paints, and solvents. The project applicant is required to implement standard best management practices with regard to hazardous materials use during construction (refer to Section 4.7, Hydrology and Water Quality). Mitigation measures related to standard handling, transportation, and disposal of hazardous substances are required. Mitigation Measures 4.6.1 through 4.6.8, 4.7.1, and 4.7.2 would reduce potential significant hazardous substances impacts associated with demolition, grading, excavation, and construction at the proposed Home Depot site to less than significant levels.

Potential short-term hazardous materials impacts at the open space site would only relate to the use of routine materials such as fuels, paints, and solvents. As described above, compliance with Mitigation Measures 4.7.1, 4.7.2 would reduce impacts associated with demolition, grading, excavation, and construction at the proposed open space site to less than significant levels

Operation. The proposed Home Depot center would utilize, store, and sell hazardous materials such as solvents, paints, and pesticides. The other proposed commercial/retail buildings and the restaurant would use and store household hazardous materials of types and quantities typical of those types of businesses. Best management practices (BMPs) are required to prevent pollutants from discharging into the storm drain system from the proposed development and in particular from the outdoor garden center (refer to Section 4.7, Hydrology and Water Quality). All businesses in the City of Long Beach that utilize hazardous materials above State thresholds are required to submit a Hazardous Materials Release Response Plan and Inventory to the Long Beach CUPA for review and approval (Municipal Code, Chapter 8.86). The CUPA has determined that operation of a Home Depot Center at the project site would require submittal of a business plan to CUPA for review and approval. Implementation of BMPs and compliance with local, State, and federal regulations regarding hazardous materials use and storage are considered adequate to address these potential hazards. Therefore, Mitigation Measures 4.6.9 and 4.7.4 would reduce potential impacts regarding use and storage of hazardous materials during operation of the project to less than significant levels.

The proposed development would be located near the AES Alamitos electrical generating plant. The plant uses a 29 percent ammonium hydroxide solution in its units for air pollution control purposes as well as other hazardous materials in its day-to-day operations.[1] The hazards associated with hazardous materials present at the AES facility include those commonly associated with the handling

[1] Telephone conversation with Steve Maghy, AES Environmental Manager, June 1, 2004.

of lubricating oils, caustics, and oxidizers. Precautions against these hazards are set forth in the plant's California ARP-required Risk Management Plan.

As part of CalARP requirements, AES Risk Management Plan (RMP) includes an Offsite Consequence Analysis for a worst-case ammonia release due to catastrophic failure of one of the 20,000-gallon aboveground storage tanks during which the tank releases all of its contents into the bermed containment area that surrounds each tank. As a criterion for assessing potentially significant exposures, the SCAQMD uses a value of 200 parts per million by volume (ppmv) over a one-hour averaging period. This value is the maximum airborne concentration at which it is believed that nearly all individuals could be exposed for up to one hour without experiencing any irreversible or other serious health effects or symptoms that could impair and individual's ability to take protective action.[1] Based on modeling conducted for the RMP, the 200 ppmv concentration could extend out to a distance of 0.1 mile.[2] As shown in Figures 4.6.3 and 4.6.4, the 200 ppmv concentration would encroach onto the project site.

Because the project would provide public receptors directly adjacent to the plant, revisions to the AES facility's Risk Management Plan and Emergency Procedures would be required to document the proximity of public receptors.[3] Emergency notification procedures currently in place at AGS include telephone alert and notification procedures, alarms, and a public address system. Because there is the potential for public receptors at the project site to be exposed to ammonia during a catastrophic release, the CUPA has determined that employees at the project site should be trained in emergency response and evacuation procedures. In addition, CUPA is requiring that the public address and alarm system currently in use at AGS be expanded to the project site boundaries. The CUPA has determined that these measures would be sufficient to prevent adverse impacts due to ammonia release.[4] Therefore, Mitigation Measures 4.6.9, 4.6.10, and 4.6.11 would reduce potential impacts from operations or emergencies at AGS to less than significant levels.

As stated above, the Pacific Energy-owned and operated Tank No. 5 and its associated equipment and pipelines would remain on site. There is the potential for the proposed project to inhibit access to these facilities in the event of an emergency. In addition, the Hazardous Materials Release Response Plan for this distribution system will require revisions to accommodate the relocated pipelines. Compliance with local, State, and federal regulations regarding release/spills and emergency response is considered adequate to address this potential hazard. Therefore, implementation of Mitigation Measure 4.6.12 would reduce potentially emergency response impacts related to these existing facilities to less than significant levels.

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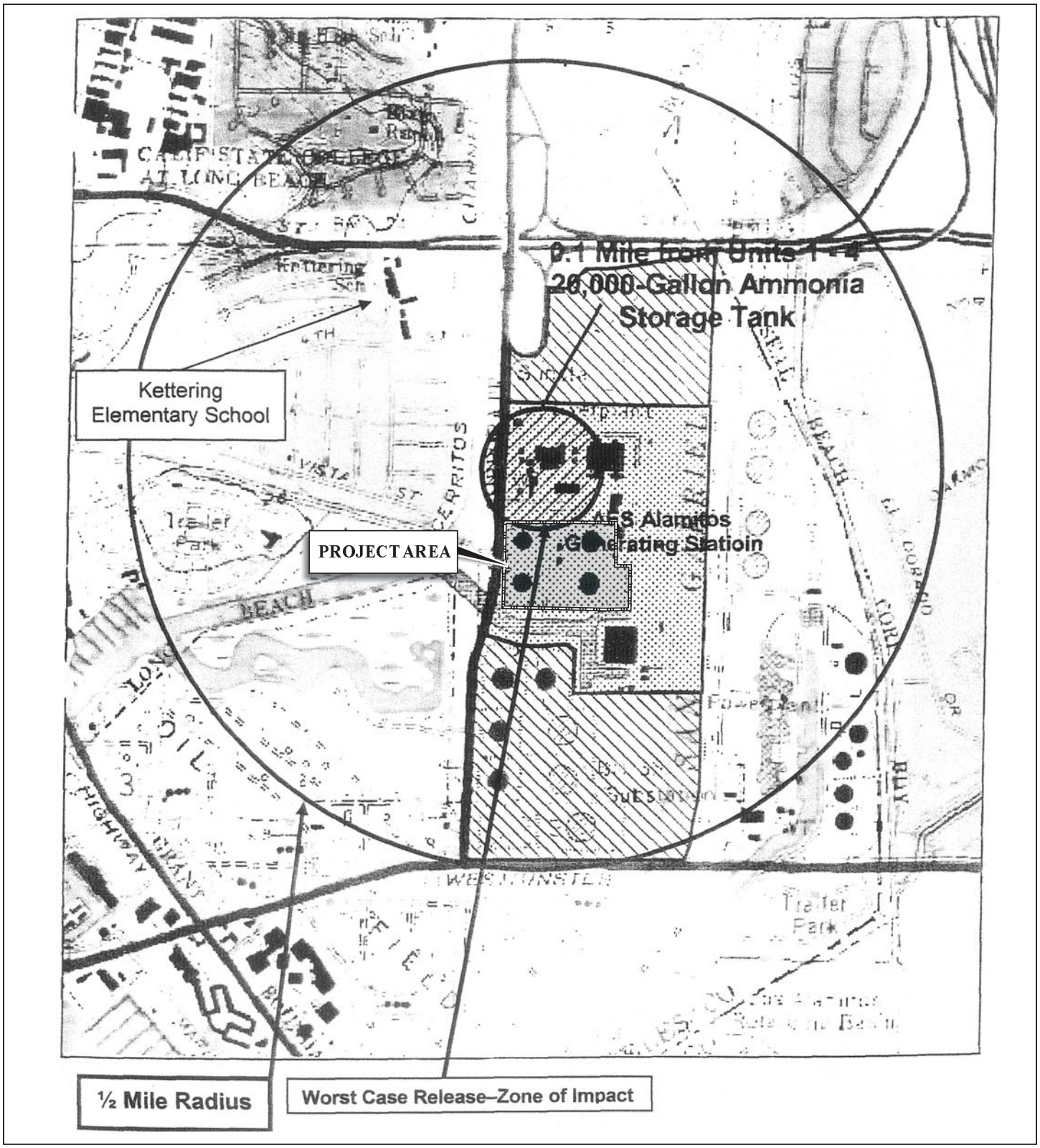
1 Final Environmental Impact Report for AES Alamitos, LLC - Selective Catalytic Reduction Installation at Alamitos Generating Station Project. Certified March 9, 2001. www.aqmd.gov/CEQA/documents/2001/nonaqmd/aes/final/aes_f.html Environmental Impact Report. March 2001.

2 ESCI EnviroServices, Inc. EPA Risk Management Program, California Accidental Release Prevention Program, Selective Catalytic Reduction (SCR) Systems, RMP & CalARP Resubmittal for AES Alamitos, LLC. June 2004.

3 Linda Kolinski, Hazardous Waste Emergency Response Planner, City of Long Beach, Department of Health and Human Services. March 14, 2006, Meeting with City staff.

4 Jeff Benedict, Manager, Environmental Health**,** City of Long Beach, Department of Health and Human Services. March 14, 2006, Meeting with City staff.



LSA

FIGURE 4.6.3

N

0 0.1 0.2
MILES

Home Depot East Long Beach

Worst Case Release - Zone of Impact
(Tank Failure)

SOURCES: URS Corp. Risk Management Plan (2002)

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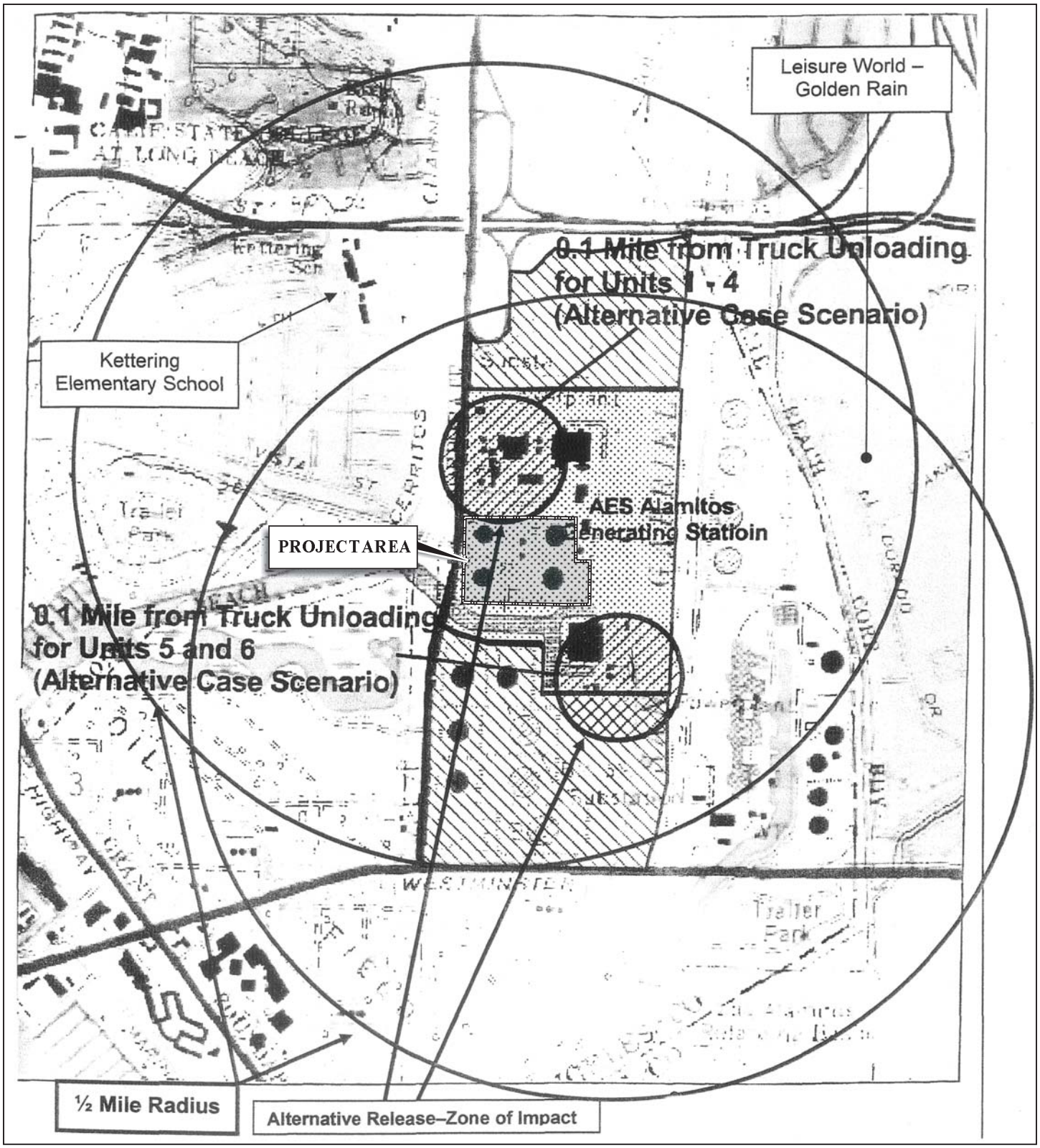

LSA

FIGURE 4.6.4

N

0 0.1 0.2
MILES

Home Depot East Long Beach

Alternative Release - Zone of Impact
(Truck Unloading)

SOURCES: URS Corp. Risk Management Plan (2002)

I:\ CLB430A\G\Truck Unloading Zone.cdr (5/16/06)

After construction and during ongoing operation of the project, methane could occur in elevated concentrations in subsurface soils at the Home Depot site. State-specified building design features such as conventional vapor barriers and soil venting systems may be necessary to prevent hazardous concentrations of methane from accumulating within buildings should post-grading concentrations exceed thresholds. These design features are subject to approval by the City of Long Beach Fire Department during final design. Implementation of Mitigation Measure 4.6.7 would reduce potential methane impacts with project operation to less than significant levels.

There are no schools within one-quarter mile of the Home Depot site. Kettering Elementary School is located within one-half mile of the Home Depot site and Hill Middle School is within one mile of the project site. Compliance with the mitigation measures identified below would ensure that any hazardous emissions or handling of hazardous substances or materials at the Home Depot Site would not result in a significant impact to the surrounding area, including the proposed project.

Open Space Site at 7th Street and Silvera Avenue. The proposed open space site is located directly north of Kettering Elementary School and approximately one-quarter mile south of Hill Middle School. The open space sit is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The proposed open space site would be landscaped and would act as an extension of Channel View Park. Potential hazardous materials associated with operation of this site would be the application of pesticides and fertilizers. The open space site would be subject to the same landscaping maintenance best management practices as the existing Channel View Park. No project-specific mitigation is required and no significant impacts would occur.

Mitigation Measures

4.6.1 Prior to project approval, the project applicant shall enter into a Consent Agreement with DTSC for remediation of the project site consistent with the Scope of Work for an RCRA RFI.

4.6.2 Prior to issuance of a grading permit, the project applicant shall provide evidence to the City that DTSC has issued a closure status for the project site and that no land use restrictions would prevent the site from being used for commercial/retail purposes.

4.6.3 Prior to issuance of any demolition permits, the project applicant shall submit an application to the City of Long Beach Fire Department for approval to remove Tanks Nos. 1–4 and 6 and associated pipeline conveyance systems from the property. The application package shall include documentation of approval of the removal process by AES Alamitos and Pacific Energy. The City of Long Beach Fire Department shall review the application for compliance with local, State, and federal requirements with tank-handling procedures including sampling and disposal of tank contents, sampling of subsurface soils, and transport and disposal of tanks and soils/liquids. The City of Long Beach Fire Department and DTSC shall oversee and monitor the operation in accordance with local, State, and federal requirements.

4.6.4 Prior to issuance of any demolition permits, predemolition surveys for ACMs and LBPs (including sampling and analysis of all suspected building materials) and inspections for PCB-containing electrical fixtures shall be performed. All inspections, surveys, and analyses

shall be performed by appropriately licensed and qualified individuals in accordance with applicable regulations (i.e.: ASTM E 1527-00, and 40 CFR, Subchapter R, Toxic Substances Control Act [TSCA], Part 716). All identified ACMs, LBPs, and PCB-containing electrical fixtures shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures (40 CFR, Subchapter R, TSCA, Parts 745, 761, and 763). Air monitoring shall be completed by appropriately licensed and qualified individuals in accordance with applicable regulations both to ensure adherence to applicable regulations (e.g., SCAQMD) and to provide safety to workers and the adjacent community. The project applicant shall provide documentation (e.g., all required waste manifests, sampling, and air monitoring analytical results) to the City of Long Beach Health Department showing that abatement of any ACMs, LBPs, or PCB-containing electrical fixtures identified in these structures has been completed in full compliance with all applicable regulations and approved by the appropriate regulatory agency(ies) (40 CFR, Subchapter R, TSCA, Parts 716, 745, 761, 763, and 795 and CCR Title 8, Article 2.6). An Operating & Maintenance Plan (O&M) shall be prepared for any ACM, LBP, or PCB-containing fixtures to remain in place and would be reviewed and approved by the City Health Department.

4.6.5 Prior to issuance of any demolition permits, the project applicant shall submit an Emergency Action Plan to the City of Long Beach Fire Department for review and approval. The plan shall include documentation of review and approval by Pacific Energy. The plan shall be consistent with local, State, and federal regulations and shall provide detailed procedures in the event of a hazardous substance leak or spill from on-site facilities, including Tank No. 5 and associated equipment.

4.6.6 Prior to issuance of a grading permit, the project site shall be remediated in accordance with the scope of work for an RCRA RFI. DTSC shall oversee and approve all phases of the investigation including the Current Conditions Report, RCRA RFI Workplan, RCRA RFI Report, Health and Safety Plan. Soils and groundwater shall be tested for VOCs, SVOCs, PAHs, metals, asbestos, and PCBs in accordance with the DTSC-approved workplan. Soil and groundwater removal, transport, and disposal shall be conducted in accordance with local, State and federal regulations; documentation shall be provided to DTSC. All remediation activity shall be completed to the satisfaction of DTSC, as well as RWQCB and CUPA as applicable.

4.6.7 After rough grading and prior to building construction and utility installation, a detailed methane soil gas investigation workplan shall be prepared by the project applicant and submitted to the City of Long Beach Fire Department for review and approval. The methane soil gas investigation shall be performed in accordance with local industry standards. The results shall be presented in a formal report that includes recommendations to mitigate potential hazards from methane, if required. The report shall be reviewed and approved by the City of Long Beach Fire Department. Based on the results of this detailed investigation, additional mitigation design may be necessary, including providing conventional vapor barriers and venting systems beneath buildings and confined spaces. Methane mitigation design shall be approved by the City of Long Beach Fire Department.

4.6.8. Prior to issuance of a grading permit, the project applicant shall submit a Soil and Air Monitoring Program and associated Health and Safety Plan to the City of Long Beach Planning and Building Department and the SCAQMD for review and approval. The program shall be consistent with local, State, and federal regulations and shall encompass all soil-disturbance activities. The Health and Safety Plan shall include the following components:

- A summary of all potential risks to construction workers, monitoring programs, maximum exposure limits for all site chemicals, and emergency procedures
- The identification of a site health and safety officer
- Methods of contact, phone number, office location, and responsibilities of the site health and safety officer
- Specification that the site health and safety officer will be contacted immediately by the construction contractor should any potentially toxic chemical be detected above the exposure limits or if evidence of soil contamination is encountered during site preparation and construction
- Specification that DTSC will be notified if evidence of soil contamination is encountered
- Specification that DTSC will be notified if contaminated groundwater is encountered during excavation activities
- Specification that an on-site monitor will be present to perform monitoring and/or soil and air sampling during grading, trenching, or cut or fill operations

The Health and Safety Plan shall be provided to all contractors on site. The Health and Safety Plan is required to be amended as needed if different site conditions are encountered by the site health and safety officer.

4.6.9 Prior to application for a business license and/or certificate of occupancy, the project applicant shall submit a Business Plan including a Hazardous Materials Release Response Plan and Inventory to the Long Beach CUPA for approval and permit. The Business Plan shall include a description of emergency response procedures and coordination with AGS with respect to alarms and public address sytems.

4.6.10 Prior to issuance of certificates of occupancy, the City of Long Beach Health Department and the Long Beach CUPA shall review the existing Business Emergency Plan, Hazardous Materials Release Response Plan and Inventory, and the Risk Management Plan for the AES Alamitos Plant and shall determine whether additional measures/revisions are necessary based on proposed project implementation, consistent with the California Health and Safety Code Section 25500, et seq. The City of Long Beach Police Department shall review the plans to determine whether security for the plant, tanks, and distribution system is in compliance with pertinent regulations.

4.6.11 Prior to application for a business license and/or certificate of occupancy, the project applicant shall submit an Emergency Response and Evacuation Employee Training Program to the Long Beach CUPA for review and approval. The business owner shall conduct drills as

required by CUPA and shall submit training documentation as part of the annual review of the Business Plan.

4.6.12 Prior to issuance of certificates of occupancy, the applicant shall submit the updated Hazardous Materials Release Response Plan and Inventory for the Pacific Energy tanks and distribution system to the Long Beach CUPA for review. The CUPA shall determine whether revisions are necessary due to proposed project implementation. The City of Long Beach Fire and Police Departments shall review and approve the proposed project plans, including the pipeline relocation for adequate emergency access and egress procedures.

4.6.6 CUMULATIVE IMPACTS

The hazardous materials study area considered for cumulative impacts consisted of (1) the area that could be affected by proposed project activities, and (2) the areas affected by other projects whose activities could directly or indirectly affect the presence or fate of hazardous materials on the proposed project site. In general, only projects occurring adjacent to or very close to the project site are considered due to the limited potential impact area associated with release of hazardous materials into the environment.

In the existing condition, the site soils and groundwater are potentially contaminated with hazardous substances that would need to be removed and transported off site to an approved disposal facility. This would be a temporary condition that is subject to regulatory oversight. Once the project site has been remediated to the satisfaction of DTSC and/or Long Beach Fire Department or the RWQCB (as applicable), like other commercial developments, project operation would involve the use and storage of household hazardous materials typical of commercial businesses and would not present a significant hazard to the environment with regulatory compliance procedures in place.

With the exception of hazardous materials transport, the proposed project would not create potential significant cumulative impacts off site. Transport of hazardous materials is closely regulated and, with implementation of Mitigation Measures 4.6.1 through 4.6.12, would be adequately monitored to ensure that there would be no significant impact to the environment or to human health. In addition, Caltrans, the California Highway Patrol, and local police and fire departments are trained in emergency response procedures for safely responding to accidental spills of hazardous substances on public roads, further reducing potential impacts.

Impacts associated with hazardous soils, groundwater, and use of hazardous materials at the project site would be controlled through application of standard regulatory procedures set forth in the mitigation measures listed above. There are no known projects adjacent to or in the vicinity of the project site that could be affected by on-site handling of hazardous materials or that could result in significant hazards or hazardous materials impacts at the site.

Transport of hazardous materials from and to the project site during construction and operation has the potential to combine with impacts from transport of hazardous materials from other projects in adjacent cities on the State highway system. However, transport of hazardous materials is subject to strict regulations, and local and State agencies are trained in emergency response procedures. Therefore, the temporary transport of existing hazardous materials and the future transport of

household hazardous materials to and from the project site does not present a significant cumulative hazard.

For the reasons outlined above, implementation of the proposed project would not result in a significant cumulative impact related to hazards and hazardous materials.

4.6.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measures described above would reduce potential project-related hazards and hazardous materials impacts to less than significant levels.

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FIGURES

TABLES

4.10 PUBLIC SERVICES AND UTILITIES

INTRODUCTION

The following section provides an analysis of utilities, public services, and public facilities for the proposed project in the City of Long Beach. Utilities include the provision or disposition of water, wastewater, solid waste disposal services, electricity, natural gas, telephone, and cable television. Public services include law enforcement and fire protection services. Public facilities, including public schools and public libraries, are not addressed in this EIR. The proposed project will not result in a population increase or create new housing; therefore, no impacts to schools are expected. As discussed in Chapter 2.0, Introduction, the proposed project will be required to pay School Impact Fees.

4.10.1 EXISTING ENVIRONMENTAL SETTING

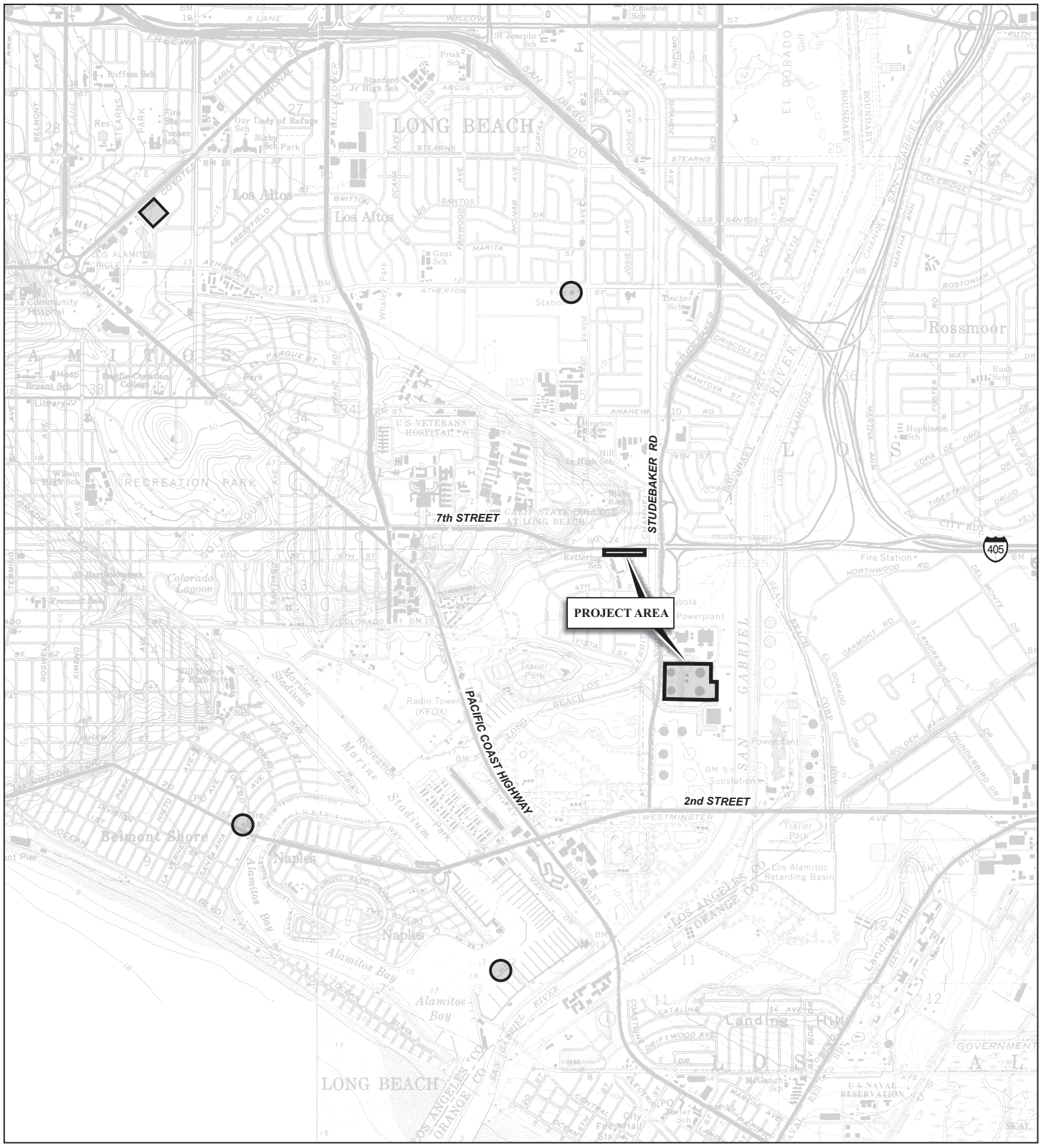
Law Enforcement

The Long Beach Police Department (LBPD) provides law enforcement services throughout the City of Long Beach. There are currently 968 sworn officers within the LBPD service area, with the current officer to population ratio being approximately 2.0 officers per 1,000 residents. It is the goal of the LBPD to strengthen that ratio to 2.5 officers per 1,000 residents. The average Citywide response time to priority one calls (life or property in imminent danger) for service is 5.2 minutes. The LBPD goal for police response times for priority one calls is under five minutes.

The LBPD operates a helicopter surveillance program; a canine unit; a full-service, 24-hour jail facility; a communications/dispatching center; an investigation bureau; and a firing range. Community-oriented police activities include community relations, traffic, and parking enforcement, a Neighborhood Watch Program, crime prevention, bicycle patrol, and a DARE Program. As part of the LBPD's service to the community, project site plans are reviewed by the Police Chief to determine the need for any additional crime prevention and safety measures.

The Patrol Bureau of the LBPD is divided into four divisions (North, South, East, and West). The LBPD eastern substation, located approximately 3.8 miles from the project site at 4800 Los Coyotes Diagonal, will serve the project area. This full-service police station serving the East Patrol Division opened in January 1994 and continues to support the LBPD's decentralization and community policing efforts. The East Patrol Division is the largest patrol division in the City of Long Beach. The maximum capacity of the substation is 145 employees, although it currently operates at approximately 85 percent capacity (123 employees). Figure 4.10.1 shows the location of the nearest police and fire stations.

The LBPD is part of the Los Angeles County Law Enforcement Mutual Aid Organization, which is overseen by the Los Angeles County Sheriff's Department. In the event that mutual aid is required, the Emergency Operations Bureau of the Sheriff's Department is notified, and in turn, notification of



LSA

LEGEND

- Fire Station
- Police Station

N

0 1000 2000

FEET

FIGURE 4.10.1

Home Depot East Long Beach

Police and Fire Stations

SOURCE: USGS 7.5' Quads - Seal Beach & Los Alamitos, Ca.

I:\CLB430\G\Police&Fire.cdr (5/26/06)

other cities in predetermined response groups occurs. The California State University Police, Long Beach Community College Police, Veteran's Hospital Police, and the United States Coast Guard are also available for mutual aid, if needed.

Fire Protection

The City of Long Beach Fire Department (Fire Department) provides fire and emergency medical response, fire prevention, and hazardous materials regulatory enforcement to the project area. As part of its service to the community, project plans are reviewed by the Fire Chief to ensure compliance with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrant placement.

The Fire Department consists of four bureaus that include Administration, Operations, Fire Prevention, and Support Services and maintains a staff of approximately 450 fire personnel. The Operations Bureau includes the Emergency Medical Services Division (EMS), which is responsible for the primary and continuing education of all firefighters as it relates to the delivery of medical services.

The Fire Department maintains 23 fire stations, a Fire Training Center, 22 engines, 4 trucks, 9 paramedic rescues, 1 foam apparatus, 3 airport fire fighting and rescue vehicles, 2 harbor fireboats, and 1 technical rescue vehicle. Fire Station Number 8, located at 5365 E. 2nd Street, and Fire Station Number 22, located at 6340 Atherton Street, are the two closest stations to the project site. If required, fire and rescue apparatus from other nearby stations in the City of Long Beach's fire protection system can provide additional support. Response times from these units vary with location and proximity to the project area. Table 4.10.A provides the locations of the nearest Fire Department stations. Figure 4.10.1 depicts the location of local police and fire stations.

Table 4.10.A: Applicable Long Beach Fire Department Station Locations

Station	Location	Distance from Project Site	Approximate Response Time	Equipment
8	5365 E. 2nd Street	1.18 miles	6 minutes	Engine company with advanced life support (ALS) capabilities
14	5200 Eliot Avenue	2.32 miles	8 minutes	Engine company with a paramedic rescue
22	6340 Atherton Street	1.86 miles	7 minutes	Engine company with ALS capabilities and a Battalion Chief

Source: Long Beach Fire Department 2004.

The average Citywide emergency response time from dispatch to arrival is less than five minutes; however, the response profile in the area of Long Beach where the proposed project site is located exceeds the Department's goals (i.e., the Fire Department usually responds to calls in less than the average Citywide response time). The Fire Department goals for emergency response are to respond

to 90 percent of emergency calls within five minutes and to respond to 90 percent of ALS calls by paramedics within eight minutes. In addition, all units on the first alarm are to arrive within eight minutes of dispatch for reported structure fires. All engines and truck companies are staffed by four firefighters and all rescue units are staffed by two firefighter/paramedics at all times. Six personnel are dispatched for life-threatening medical responses, and a minimum of 19 personnel are dispatched for initial response to structure fires. Currently there are no plans for expansion of department facilities.

The Fire Department maintains a limited mutual aid agreement with the Los Angeles County Fire Department. That agreement is currently under examination and may be significantly altered or eliminated in the near future. The Fire Department is also part of the California Office of Emergency Services Master Mutual Aid system.

The Insurance Services Office (ISO) conducts a municipal survey and ranks cities as to their degree of fire safety. Cities are evaluated in terms of deficiency points and are then assigned a class ranking between 1 and 10, with 1 being the highest rating. The Long Beach Fire Department received a class 1 ranking during the last survey.

The City of Long Beach adopted the California Fire Code (CFC), with some amendments and modifications, as part of the part of the City's Municipal Code. Fire flow requirements are based on building types and floor area and range from 1,250 to 8,000 gallons per minute (gpm) at 20 pounds per square inch (psi). The modifications include amendments to fire extinguisher and storage requirements. Generally, the intent of the CFC is to prescribe regulations consistent with nationally recognized good practices for the safeguarding of life and property from the hazards of fire and explosion.

In accordance with the CFC, the Fire Department requires the installation of sprinkler systems in many new buildings, including retail buildings in excess of 5,000 square feet and buildings greater than 55 feet in height. In addition, on-site hydrants are required in any portion of a project site that exceeds the allowable distance from a public hydrant located in the right-of-way. Fire flow requirements are subject to Fire Department standards based on the type of building and use on a case-by-case basis.

Natural Gas

Natural gas resources are drawn upon at naturally occurring reservoirs primarily located outside of the State and delivered via a high-pressure transmission line. California has three primary regional access points where interstate pipelines deliver natural gas into the State. Gas destined for southern California is accessed at a series of market hubs, with interconnections to Pacific Gas and Electric (PG&E) and the Southern California Gas Company. As the gas is transported to its destination, the pressure is maintained with the assistance of compressors. The gas is then received at a storage field (e.g., underground storage tanks) and redistributed through another series of transmission lines.

The Long Beach Energy Department (Energy Department or LBE) receives gas from the Southern California Gas Company and is the natural gas provider in the City of Long Beach. The Energy Department has the capacity to deliver over 155 million cubic feet (cu ft) per day, with a historic peak

delivery of 73 million cu ft in December 1998. This peak delivery represents about 47 percent of the Energy Department's delivery capacity.

The Energy Department maintains a 14-inch natural gas line in Seventh Street and a 16-inch natural gas line in Studebaker Road. The project site currently does not have natural gas service. Figure 4.10.2 shows the location of natural gas lines surrounding the proposed project site.

The Long Beach Gas Department has stated that these facilities and the interconnecting system are currently in good operation. Currently, the Energy Department does not have any plans for expansion of existing facilities near the proposed project area. Service availability is based upon present gas supply conditions and regulatory policy.

Electricity

The project site is within the service territory of the Southern California Edison Company (SCE). According to the California Energy Commission (CEC), the SCE service area experienced a peak demand of 18,724 megawatts (MW) in 2000 and a total local growth of 98.3 million MW hours[1] (MWh). The CEC estimates that peak demand and net energy load within SCE service territory will continue to grow annually by 2.4 percent and 2.0 percent, respectively. In light of these forecasts, the CEC projects a peak demand in SCE service territory of 24,960 MW in 2012 (the latest year in the current demand forecasts) and a net energy load of 125.2 million MWh.

Although the project site is currently developed as a "tank farm" and contains aboveground storage tanks (ASTs), pipelines, and equipment associated with petroleum products storage and transfer, only the pipelines and one of the smaller ASTs will remain in use. Pacific Energy, the pipeline operator, has an easement on the property that allows the pipelines to cross the property and employs maintenance personnel to access equipment. As the easement holder, Pacific Energy bears the cost of any utility use associated with pipeline operations. The electricity usage associated with the pipelines is not linked to the proposed project site, and there are currently no other electricity using activities occurring on site.

SCE maintains overhead electric transmission lines on Studebaker Road. Currently, SCE does not have plans for expansion of its facilities.

Title 24 of the California Administrative Code, known as the California Building Energy Efficiency Standards, regulates energy consumption in new construction. These standards are typically updated every three years by the CEC and are enforced through the local building permit process. Title 24 regulates building energy consumption for heating, cooling, ventilation, water heating, and lighting. It may be met in one of the following two ways: by meeting performance criteria (measured in British Thermal Units [BTU] per square foot per year) or by installing a prescriptive list of energy conservation measures.

[1] A watt-hour is an electric energy unit of measure equal to one watt of power supplied to (or taken from) an electric circuit steadily for one hour.

Water

The Long Beach Water Department (LBWD) supplies water to the project area through a system of underground pipelines. There are two types of water supply sources: natural resources and reclamation. Water is used for fire control purposes as well as for drinking (potable), washing, flushing, recreational purposes, and other domestic consumption. Reclaimed water is wastewater that has been treated to a sufficient degree for certain types of uses, is nonpotable, and must be conveyed in a separate system from potable water to avoid the possibility of direct human consumption. Reclaimed water can be used for irrigation purposes.

The LBWD provides water services for domestic, irrigation, and fire protection purposes to developments within the City of Long Beach. The LBWD also reviews project plans to ensure compliance with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrant placement. The LBWD provides 100 percent of the City's water needs, mixing locally developed water from LBWD operated wells with water from the Metropolitan Water District (MWD). The LBWD takes advantage of the MWD's off-peak rate structure during the winter months, beginning in September. During the summer months, the LBWD satisfies almost 42 percent of its demand by pumping its own wells and about 50 percent by importing water from the MWD. The remaining 8 percent of the water supply for nondrinking purposes is tertiary treated reclaimed water from the Sanitation Districts of Los Angeles County Long Beach Reclamation Plant owned and operated by the County Sanitation Districts of Los Angeles. Water in the harbor area and north and west portions of Long Beach is purchased from MWD and distributed from the J. Will Johnson Reservoir. The Harbor Department (the Port of Long Beach) gets its water from three sources, including LBWD's Alamitos Reservoir, LBWD's J. Will Johnson Reservoir and from the Los Angeles Department of Public Works (LADPW). The LADPW currently serves the western portion of the Port of Long Beach.

The LBWD also provides reclaimed water services within the City of Long Beach. The Water Reclamation Plan provides approximately 21 million gallons per day (mgd) of reclaimed water. The City of Long Beach utilizes water for irrigation in local parks, golf courses, schools, cemeteries, nurseries, freeways, greenbelts, and other landscaped areas.

LBWD maintains 12-inch and 20-inch water lines in Studebaker Road. The project site is currently served by connections to the 12-inch water line in Studebaker Road. The project site is not currently served by a reclaimed water line. LBWD maintains a 21-inch reclaimed water line that runs east/west through the intersection of Studebaker Road and Atherton Street. In addition, there is a possible connection point to a 6-inch reclaimed water line at the intersection of Colorado Street and Orlena Avenue.[1]

Water demand generally consists of water utilized for human consumption, kitchen, toilet, bath, and irrigation purposes. As previously stated, the proposed project site is currently developed as a "tank farm" and contains ASTs, pipelines, and equipment associated with petroleum products storage and transfer; however, only the pipelines and one of the smaller ASTs will remain in use. Pacific Energy, the pipeline operator, has an easement on the property that allows the pipelines to cross the property and allows maintenance personnel to access equipment. As the easement holder, Pacific Energy bears the cost of any utility use associated with pipeline operations. Water usage associated with the

[1] Information obtained from LBWD, December 23, 2004.

pipelines is not linked to the proposed project site, and there are currently no other water-using activities occurring on the project site.

Sewer

The Vista Street sewer system provides sewer services to the residential area between Loynes Drive and East 7th Street just west of the Los Cerritos Channel. The residential area and Kettering Elementary School are served by two interconnected systems of 8-inch diameter vitrified clay pipe (VCP) sewers that combine at a manhole located at the intersection of Vista and Daroca Streets. Within the residential area, there are cross-linked manholes that allow flow from one area to be conveyed to the other area as one area becomes hydraulically overloaded. From the manhole at Vista Street and Daroca Street, wastewater flows by gravity through a 261-foot long flow limiting section of 8-inch diameter VCP sewer. This sewer line conveys wastewater to the fist manhole on the golf course, where the sewer enlarges to a 10-inch diameter sewer line. Sewage from the golf course, club house, and a restroom on the golf course discharge to a 10-inch diameter sewer line that flows to the Marina Trunk Sewer, Section 3, located in Pacific Coast Highway north of Loynes Drive. From there, sewage flows into the Los Angeles County Sanitation Districts (LACSD or Sanitation Districts) Pacific Coast Highway lift station for conveyance to one of its treatment plants.

Two sewer flow studies were conducted to analyze existing conditions for the Vista Street sewer system; one in December 2003 during dry weather conditions and the other in February 2005 during wet weather conditions. According to the two flow studies, during wet-weather conditions, the existing flow through the 261-foot-long, flow-limiting section of 8-inch-diameter VCP sewer exceeds the design flow capacity. In addition, during extreme wet-weather conditions, the existing flow with the additional proposed project flow will exceed the maximum capacity of the 8-inch-diameter VCP sewer in Vista Street between Margo Street and Daroca Avenue.

The Sanitation Districts are a confederation of independent special districts that provide wastewater and solid waste services to about 5.4 million people in Los Angeles County. The Sanitation Districts' service area covers approximately 800 square miles and encompasses 78 cities, including the City of Long Beach, and unincorporated territory within the County.

The proposed project site is currently located outside the jurisdictional boundaries of LACSD and must be annexed into LACSD District 3 before sewerage service can be provided to the proposed development. The Long Beach Water Department will be the wastewater service provider for the project site. Project site wastewater will flow into the LBWD sewer system and eventually into the LACSD system. The LBWD operates and maintains nearly 765 miles of sanitary sewer lines that deliver over 40 million gallons of wastewater per day (mgd), to LACSD facilities. Currently, a majority of the City's wastewater is delivered to the Joint Water Pollution Control Plant (JWPCP) of the LACSD, which has a design capacity of 385 mgd and currently processes an average flow of 322.7 mgd. The remaining portion of the City's wastewater is delivered to the Long Beach Water Reclamation Plant of the LACSD. The Plant provides treatment for approximately 25 mgd of waterwater.

Solid Waste

The City of Long Beach is a member of the Sanitation Districts of Los Angeles County, a confederation of independent special districts that provide wastewater and solid waste services in Los Angeles County. The Sanitation Districts work to commit all waste to the County landfill system. The proposed project is currently located outside the jurisdictional boundaries of LACSD and must be annexed into LACSD before commencement of solid waste collection services. Following annexation, there are numerous public and private landfills and transfer stations in Los Angeles County that could potentially receive waste collected from the proposed project. In addition, the Sanitation Districts are seeking permitting for two waste-by-rail facilities outside of Los Angeles County: Mesquite Regional Landfill in Imperial County and Eagle Mountain Landfill in Riverside County. The Mesquite Regional Landfill is fully permitted to accept residual waste by rail, and the Sanitation Districts expect the landfill to be in operation by the end of 2008. For this reason the provision of solid waste disposal services should be considered in the context of the regional and local landfills.

Solid waste in Los Angeles County is collected by over 250 waste haulers and several city governments and disposed of at landfills in the County, transformation (i.e., refuse-to-energy) facilities, or intermodal facilities that transport the waste by rail to facilities outside Los Angeles County. There are two primary classifications of land disposal facilities, Class III landfills and Unclassified (inert) landfills. Class III landfills accept all types of nonhazardous solid waste, with major Class III facilities permitted to receive 250,000 tons or more of waste per year and minor facilities permitted to receive less than 250,000 tons per year. Unclassified landfills accept only inert waste, including soil, concrete, asphalt, and other construction and demolition debris (as defined by California Code of Regulations, Title 23, Section 2524).

Within the City of Long Beach, solid waste collection services are provided by the City's Environmental Services Bureau and 21 private permitted waste haulers. In 2002, residents and businesses in the City of Long Beach disposed of 675,741 tons of solid waste. This disposal amount reflects a diversion rate of approximately 44 percent.

The Puente Hills Landfill is the closest Class III landfill operated by LACSD that could be used by the proposed project. The conditional use permit for the Puente Hills Landfill authorizes the disposal of a maximum of 13,200 tons per day. Typically, the landfill closes early due to this permit-imposed tonnage restriction. Disposal operations will continue under the conditional use permit until October 31, 2013, at which time the site will stop accepting waste for disposal. As indicated in Table 4.10.B, 241,923 tons, or 36 percent of the solid waste disposed of by City residents and businesses, were disposed of at the Puente Hills Landfill.

The Puente Hills Materials Recovery Facilities (MRF), located close to the landfill, is also owned and operated by LACSD. The purpose of the MRF is to recover recyclable materials from commercial waste and to provide for the efficient transfer to the residual waste to permitted landfills for proper disposal. The MRF is currently under construction and is scheduled for completion in late 2004. The facility is permitted to accept 4,400 tons per day or 24,000 tons per week of municipal solid waste. It is likely that the MRF will start operating at 2,000 tons per day and, as market demand necessitates, increase to full capacity.

Table 4.10.B: Solid Waste Disposal by Facility, 2002

Facility Name (County)	Disposal Amount (tons)	Percent of Total
Arvin Sanitary Landfill (Kern)	152	0.02%
CWMI-B18 Nonhazardous Codisposal (Kings Waste and Recycling Authority)	441	0.07%
Antelope Valley Public Landfill (Los Angeles)	259	0.04%
Azusa Land Reclamation Co., Inc. (Los Angeles)	3,196	0.47%
Waste Management of Lancaster SLF (Los Angeles)	54	0.01%
Chiquita Canyon Sanitary Landfill (Los Angeles)	17,517	2.59%
Puente Hills Landfill #6 (Los Angeles)	241,923	35.80%
Commerce Refuse to Energy Facility (Los Angeles)	696	0.10%
Sunshine Canyon SLF County Extension (Los Angeles)	5,923	0.88%
Southeast Resource Recovery Facility (Los Angeles)	271,332	40.15%
Bradley Landfill West and West Extension (Los Angeles)	7,150	1.06%
Prima Deshecha Sanitary Landfill (Orange)	23,187	3.43%
Olinda Alpha Sanitary Landfill (Orange)	70,494	10.43%
Frank R. Bowerman Sanitary Landfill (Orange)	7,723	1.14%
El Sobrante Sanitary Landfill (Riverside)	19,520	2.89%
Colton Refuse Disposal Site (San Bernardino)	10	0.00%
Fontana Refuse Disposal Site (San Bernardino)	7	0.00%
San Timoteo Solid Waste Disposal Site (San Bernardino)	19	0.00%
Simi Valley Landfill-Recycling Center (Ventura)	6,139	0.91%
Total	**675,741**	**100.00%**

Source: CIWMB, Disposal Reporting System, Jurisdiction Disposal and Alternative Daily Cover Tons by Facility for the City of Long Beach, 2004.

Other solid waste management facilities operated by LACSD that are available to accept solid waste from the proposed project site include the South Gate Transfer Station, the Commerce Refuse to Energy Facility (CREF), and the Downey Area Recycling and Transfer Facility (DART). The South Gate Transfer Station is permitted to accept up to 1,000 tons per day of refuse and currently receives approximately 545 tons per day of refuse. CREF is a transformation facility (i.e., refuse-to-energy) that is permitted to accept up to 1,000 tons per day, not to exceed 2,800 tons per week. CREF currently receives approximately 360 tons per day of refuse. DART is a materials recovery/transfer facility that is permitted to accept up to 5,000 tons per day and currently receives approximately 1,000 tons per day of refuse.

The Sanitation Districts also participate in ownership of the Southeast Resource Recovery Facility (SERRF) through a Joint Powers Agreement with the City of Long Beach. SERRF is a transformation facility operated by a contractor. SERRF is permitted to accept 2,240 tons of refuse per day or 500,000 tons per year and currently receives approximately 1,500 tons per day. Over 1.5 billion kilowatts of electricity generated by the facility have been sold to Southern California Edison (SCE). In 2002 approximately 271,332 tons of the solid waste (40 percent) disposed of by City of Long Beach residents and a business was disposed of at SERRF.

The California Integrated Waste Management Board (CIWMB) developed waste information for different business types based on the assumption that similar businesses have similar waste streams. Since there are many types of businesses, CIWMB used federal Standard Industrial Classification (SIC) codes to group businesses together. Generally, the larger the business (indicated by number of employees), the more solid waste disposed. The number of employees is used in the CIWMB disposal characterization database to develop waste disposal rates for businesses. The assumption of the database is that businesses of a certain type (e.g., restaurants) dispose similar wastes at similar rates (per employee), regardless of the location or size of the business.

There are, however, no employees associated with a business located on the project site. There are employees associated with the maintenance and operation of pipelines that cross the project site; however, their daily tenure on the project site is minimal, making it difficult to estimate the solid waste disposal rates for on-site activities. Further, as the leaseholder, Pacific Energy is responsible for disposal of any solid waste generated by on-site activities related to pipeline operations.

State legislation (Assembly Bill AB 939) requires that every city and county in California implement programs to recycle, reduce refuse at the source, and compost solid waste in order to achieve a 50 percent reduction in solid waste disposed of at landfills. AB939 also requires that all cities conduct a Solid Waste Generation Study (SWGS) and prepare a Source Reduction Recycling Element (SRRE). In accordance with AB 939, local agencies must submit an annual report to the CIWMB summarizing its progress in diverting solid waste disposal.

Senate Bill 1374 also requires that the annual report submitted to CIWMB include a summary of the progress made in diversion of construction and demolition waste materials. In addition, SB 1374 requires the CIWMB to adopt a model ordinance suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition waste materials from landfills by March 1, 2004. Local jurisdictions are not required to adopt their own construction and demolition ordinances, nor are they required to adopt CIWMB's Model by default. However, adoption of such an ordinance

may be considered by the CIWMB when determining whether to impose a fine on a jurisdiction that has failed to implement its SRRE.

Waste haulers are expected to contribute by recycling residential and commercial waste they collect, and project developers are expected to employ measures to reduce the amount of construction-generated waste by 50 percent or more. During reporting year 2000, the City of Long Beach was in full compliance with waste diversion goals set by the State of California. The CIWMB has not approved or accepted diversion rates reported by the City of Long Beach since it accepted the 2000 report in March 2002. Biennial Reviews indicate that diversion rates for 2002 and 2003 may be between 41 and 46 percent and 39 and 44 percent, respectively. However, the City of Long Beach receives a 10 percent waste diversion credit through use of the SERRF, thereby raising the City's waste diversion rate to an acceptable level.

The City of Long Beach has increased efforts to divert refuse through waste reduction, recycling, and composting programs. Source reduction programs in place include xeriscaping/grasscycling, backyard and on-site composting/mulching, and business waste and government source reduction program. The City provides recycling services such as residential curbside recycling and commercial pickup service through a private contractor. In addition, each of the 21 permitted private waste haulers operating in the City is required to have a City-approved recycling program in order to meet applicable waste diversion requirements. In order to maintain compliance goals, contractors will be required to reuse construction forms where practicable or applicable, attempt to balance soils on site, minimize overcutting of lumber and polyvinyl chloride (PVC) piping where feasible, and reuse landscape containers to the extent feasible.

4.10.2 METHODOLOGY

Public service and utility providers were sent a Notice of Preparation (NOP) and questionnaire that requested current levels of service to the project site and information on possible constraints or impacts to their services at project build out. The impact analyses are based upon the NOP comments and responses to the questionnaires or information obtained through subsequent phone conversations with service provider representatives. Correspondence from the public service and utility providers was included in Appendix A of DEIR 2005.

4.10.3 THRESHOLDS OF SIGNIFICANCE

Thresholds for impacts to public services and utilities are based on Appendix G of the State CEQA Guidelines, as adapted to the circumstances of the project. For the purposes of this analysis, the effects of a project on public services, utilities, and infrastructure are considered to be significant if the proposed project would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for public services, including fire protection, police protection, or other public facilities;

- generate demand for service that would require a substantial increase (10 or more) in personnel to maintain acceptable service ratios, response times, or other performance objectives for public services, including fire protection, police protection, or other public services;
- generate demand for electricity, or natural gas that exceeds the capacity of existing public service systems or otherwise requires expansion or construction of major new facilities leading to a significant physical impact;
- cause significant disruption of service(s) that creates a significant physical impact or threat to human health;
- require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- require new or expanded water entitlements to have sufficient water supplies available to serve the project;
- result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve projected demand in addition to the provider's existing commitments;
- be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- not be in compliance with federal, State, and local statutes and regulations related to solid waste.

4.10.4 IMPACTS AND MITIGATION MEASURES

Less Than Significant

Fire Protection. The proposed project will increase the number of on-site visitors and employees. An increase in structures and population (i.e., employees and customers) can result in an increase in calls for emergency fire and medical services. The project will comply with all LBFD and CFC requirements, including access requirements, the placement of fire hydrants, and the use of sprinkler and standpipe systems. Project compliance with requirements set forth in the City of Long Beach Building and Safety Code, the CFC, and current ISO Guidelines will provide fire protection for people and structures, as well as the provision of medical services on site.

It is anticipated that the proposed project will not significantly impact emergency response times. In a letter dated August 2, 2004, the City of Long Beach Fire Department indicated that the additional call volume generated by the proposed project will increase workload in an area of the City where the Fire Department already has response times that exceed Department goals. With project implementation, the response profile for the project area will remain unchanged in terms of service delivery. Based on the current response profile, the proposed project will not require 10 or more additional personnel to maintain acceptable service ratios, response times, or other performance objectives. The City of Long Beach Fire Department will be able to service the proposed project at the same levels provided to the surrounding areas, and no significant impacts to fire protection services are expected as a result of project implementation (Alan Patalano, Deputy Fire Chief, August 2, 2004).

Similarly, the proposed 1.37-acre open space site southeast of the intersection of 7th Street and Silvera is not expected to significantly impact emergency response times or calls for service and will not result in a significant impact to fire protection services in the City of Long Beach.

Per the Uniform Fire Code (UFC), fire flow requirements are based on building type and floor area and range from 1,250 to 5,000 gpm at a pressure of 20 psi. Based on an analysis of the domestic water system, it was determined that the required 5,000 gpm can be delivered to all of the on-site project areas. As such, water system capacity within the City of Long Beach will be adequate to handle fire flow requirements for the proposed project. The project will include a new water system for water delivery throughout the site. Infrastructure will be sized to accommodate the required fire flows, and the City of Long Beach Fire Department will determine the required flow for individual structures based on type of construction, building size, and occupancy. Adequate water pressure and pipeline capacity exist in the main service lines that will serve the property to provide adequate fire flow, and no improvements to the existing water system will be required. Therefore, no significant impacts related to fire flow will occur as a result of project implementation.

Natural Gas. Gas service will be extended to the project site as part of the proposed project. The proposed project includes the construction and installation of a new on-site natural gas distribution. As stated in Chapter 3.0, Project Description, the project also includes installation of a four-inch gas line connecting the development to the existing 14-inch gas line at the intersection of Studebaker Road and Seventh Street or the 16-inch gas line in Studebaker Road. The distribution system will incorporate the most up-to-date design and construction, operational, and conservation standards to most efficiently meet the project's energy needs. New facilities will be installed per the construction standards and tariffs set by LBE. The installation of gas meters will be completed in accordance with the specifications of LBE, and to the extent feasible, gas meters will be installed outside structures.

As shown in Table 4.10.C, development of the proposed project will generate a demand for approximately 463,000 cubic feet cubic feet of natural gas per month. The proposed 1.37-acre open space site southeast of the intersection of 7th Street and Silvera will not require gas service and will not change the estimated project demand for gas services. As shown in the table, retail consumption factors were used to estimate natural gas demand for the proposed project.

Table 4.10.C: Estimated Natural Gas Usage

Land Use	Floor Area (square feet)	Consumption Factor (cu. feet/square foot/month)	Monthly Gas Consumption (cu. feet/month)
Retail/Shopping Center	159,579	2.9	462,779.1

Source: SCAQMD Natural Gas Usage Rate (G), Table A9-12-A.

Project gas demand represents approximately 0.01 percent of LBE's total daily delivery capacity. LBE presently uses approximately 47 percent of its daily delivery capacity, leaving 53 percent of its capacity available. In addition, the Southern California Gas Company is in the process of increasing the availability of natural gas through transmission expansion projects and withdrawals from several of its storage fields. Consequently, the supply and distribution of natural gas within the area

surrounding the project site will not be reduced or inhibited as a result of project implementation, and levels of service to off-site users will not be adversely affected.

The Building Energy Efficiency Standards found in Title 24 of the California Administrative Code regulate energy consumption in new construction. These standards are typically updated every three years by the CEC and are enforced through the local building permit process. Title 24 regulates building energy consumption for heating, cooling, ventilation, water heating, and lighting. It may be met in one of the following two ways: by meeting performance criteria (measured in British Thermal Units [BTU] per square foot per year) or by installing a prescriptive list of energy conservation measures.

Project compliance with Title 24 standards will further reduce any potential impacts on natural gas resources. Based on the above, substantial adverse impacts related to the provision of natural gas services to the project site will not occur, and the proposed project will not result in the use of substantial amounts of natural gas. Therefore, no significant impacts to local or regional supplies of natural gas will occur as a result of the proposed project.

Electricity. The proposed project includes the construction and installation of a new on-site electricity distribution system that will connect to existing overhead transmission facilities on Studebaker Road and along the southern project boundary. The proposed 1.37-acre open space site southeast of the intersection of 7th Street and Silvera Avenue will tie into the existing electrical distribution system under 7th Street. These facilities have adequate capacity to handle the electricity demand of the proposed project because the proposed project uses are considered incidental to overall system demand. The distribution system will incorporate the most up-to-date design, construction, operational, and conservation standards to most efficiently meet the project's energy needs. New facilities will be installed per the construction standards and tariffs set by SCE.

An evaluation of project electricity needs in relation to future energy loads illustrates that project implementation will not result in substantial amounts of electricity usage. Using usage rates derived by SCAQMD, the project demand for electricity on the Home Depot site is estimated to be approximately 2,435 MWh annually (Table 4.10.D). Demand for electricity on the proposed open space site would be minimal because electricity would only be required for path lighting from dusk to dawn. To provide a conservative estimate of electricity demand for the Home Depot project site, retail and restaurant demand rates were used; actual demand for electricity may be lower that the estimates provided in this analysis. Based on CEC projections for SCE's service area in 2012, the maximum project-related annual consumption will represent less than 0.01 percent of the forecast energy load. Based on these estimates, sufficient transmission and distribution capacity exists, off-site improvements will not be necessary, and on-site improvements will occur in a logical, efficient manner utilizing the most up-to-date design, construction, and operational methods available as included in project development plans. Impacts associated with the provision of electricity will be less than significant. Additionally, the supply and distribution of electricity to the project site will not disrupt power to the surrounding area or adversely affect service levels. Therefore, impacts associated with project electricity demand will be less than significant.

Table 4.10.D: Estimated Project Electricity Usage

Land Use	Floor Area	Consumption Factor (KWh/square foot/year)	Monthly Electricity Consumption (KWh/year)*
Restaurants	8,050	47.45	381,973
Retail	151,529	13.55	2,053,218
Total	**159,579**	**—**	**2,435,191**

* Average for Southern California Edison and Los Angeles Department of Water and Power
Source: SCAQMD CEQA Handbook, Electric Usage Rate (G), Table A9-11-A.

Water. The proposed project includes the replacement of existing on-site infrastructure and provides connections to existing water mains under Studebaker Road. Existing on-site lines will be abandoned and removed, and new water lines will be constructed. Project water lines will include an on-site loop system connecting two 8-inch lines to the 12-inch water main in Studebaker Road. When the on-site water lines are connected to LBWD water lines in Studebaker Road, coordination with LBWD will be necessary.

In addition, the 1.37-acre proposed open space site southeast of the intersection of 7th Street and Silvera Avenue will connect to an existing water main located under 7th Street.

New development will result in both short-term and long-term increases in water demand. A short-term demand for water may occur during demolition, excavation, grading, and construction activities on site. Water demand for soil watering (fugitive dust control), cleanup, masonry, painting, and other activity will be temporary. The demand for water during grading and construction activities is assumed to be similar to irrigation demand, or approximately 2,660 gallons per acre per day. Overall, demolition and construction activities require minimal water and are not expected to have any adverse impacts on the existing water system or available water supplies. Therefore, impacts associated with short-term construction activities will be less than significant.

New development on site will result in an increase in long-term water demand for landscaping and project operations. As previously mentioned, potable water used for human consumption will be obtained from the LBWD.

Although all new development will be required to comply with State laws regarding water conservation measures, including pertinent provisions of Title 20 and Title 24 of the California Government Code regarding the use of water-efficient appliances, the proposed project will still result in an increase in water demand. Estimated project water demand was calculated using flow coefficients found in the Domestic Water Demand Study prepared by Boyle Engineering for the City of Long Beach in 1994. As indicated on Table 4.10.E, the total average daily potable water demand for the retail/commercial portion of the proposed project is estimated to be approximately 38,448 gpd.

Table 4.10.E: Estimated Project Water Demand

Proposed Land Use	Acreage	Flow Coefficient	Projected Water Demand (gpd)
Retail/Shopping Center	17.8	1.5 gpm	38,448
Average Daily Demand	—	—	38,448
Maximum Daily Demand**	—	—	66,130.56

** Maximum Daily Demand = 1.72 x Average Daily Demand
Source: Long Beach Water Department, Domestic Water Demand Study, Boyle Engineering, 1994.

In addition to water used by the retail/commercial portion of the proposed project, water will also be used to irrigate the proposed open space site at the intersection of 7th Street and Silvera Avenue. Based on an estimated water usage of 2 inches per acre per week, water demand for irrigation of the open space site will be approximately 74,100 gallons per week or 10,586 gpd.[1]

Based on consultation with the LBWD, the project will not necessitate new or expanded water entitlements, and the LBWD will be able to accommodate the increased demand for potable water. Therefore, project impacts associated with an increase in potable water demand are considered less than significant.

Private on-site water systems will be designed and constructed to provide adequate water service and flows for the proposed project, and project implementation will not disrupt or inhibit service currently provided in the area surrounding the project site or in other areas of the City of Long Beach. Project impacts related to the provision of potable water are considered less than significant.

Sewer. Due to the lack of existing sanitary sewer facilities at the site, the proposed project includes construction of a sewer line connecting the project site to the existing Vista Street sewer system described above. Figure 3.8, Sewer Extension, illustrates the proposed changes to the existing sewer system. The on-site sewer system will be constructed to Long Beach Planning and Building standards and maintained by Studebaker LB, LLC. Gravity sewer lines in public streets or Long Beach Water Department (LBWD) easements will be designed to LBWD standards. The project also includes the annexation of the project site into Los Angeles County Sanitation District No. 3.

The proposed on-site sewer system will collect all sanitary waste from the development and discharge to an on-site lift station located approximately 300 feet east of the development's main entrance. The lift station will be equipped with a wet well (storage), which will temporarily hold the wastewater for periodic pumping and contain peak-flow volumes. The wet well will be sized to contain approximately twice the volume needed for the estimated peak-flow volumes. The lift station would be equipped with primary (lead) and secondary (back-up) grinder pumps. These pumps grind large materials to fine slurry and pressurize it for conveyance to the existing sanitary sewer system. The pumps will produce flows of approximately 10 to 15 gallons per minute (gpm) and a combined maximum output of approximately 30 gpm if both pumps operate simultaneously. Whenever there is sufficient volume in the lift station wet well, level sensors will activate the lead pump. On average, the pumps would operate less than three hours per day. Should the lead pump fail, the back-up pump would start automatically.

[1] Robert Villanueva. Long Beach Water Department. May 24, 2006.

The lift station would also be equipped with an odor control system to eliminate odors. Wastewater generates odors when stored for a long period of time and begins to undergo anaerobic (without air) degradation. Three types of odor control technology will be considered. The first prevents the degradation by blowing air into the storage tank. The second and third technologies remove odor that may be created by long-term (hours) wastewater storage.

Sewage would flow from the lift station to the City of Long Beach sewer system via a low-pressure pipe (force main) beneath Studebaker Road and across the Los Cerritos Channel. The pipe across the Channel will be double-walled to contain any leaks that might occur in the primary pipe. A leak detection system will be installed to detect any leaks in the primary pipe and send an alarm notification indicating that repair is needed. After the force main crosses the Channel, it will submerge again until reaching the intersection of Loynes Drive and Vista Street. The pressure pipe will discharge by gravity to the first manhole in the Vista Street sewer system, located approximately 200 feet north of the intersection.

The project includes the replacement of 265 feet of an existing 8-inch public sewer line with a 10-inch sewer line in Vista Street between Daroca Street and Margo Street and the replacement of 261 feet of an 8-inch sewer line with a 10-inch sewer line between the manhole at Daroca and Vista Street and the first manhole in the golf course. From there, the wastewater would be conveyed to the Sanitation District's Marina Trunk Sewer, Section 3, located in Pacific Coast Highway north of Loynes Drive.

Replacement of the existing 8-inch sewer lines with 10-inch sewer lines will serve the proposed project and correct the hydraulic overloading conditions that currently exist during wet weather conditions. The existing Sanitation Districts 15-inch trunk sewer has a design capacity of 4.6 mgd and conveyed a peak flow of 1.2 mgd when last measured in 2003. Therefore, there is capacity for increased flows generated by the project.

The wastewater generated by the project site will be treated at the Joint Water Pollution Control Plan (JWPCP) located in the City of Carson, which has a design capacity of 385 mgd and currently processes an average flow of 322.7 mgd. The JWPCP provides full secondary treatment to all wastewater received.

In order for the Sanitation Districts to conform to the requirements of the Federal Clean Air Act, the design capacities of the Sanitation Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Any future expansions of Sanitation District facilities must be sized and service phased in a manner that is consistent with SCAG regional growth forecasts for Los Angeles County. The available capacity of the Sanitation Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG.

The proposed project will generate about 10,000 gallons of wastewater per day. This estimate primarily includes waste from employees, customers, and food preparation based on information

provided by the project architect[1]. Flows will generally occur during business hours (normally 5:00 a.m. to 11:00 p.m.) and may be preceded or followed by restaurant early morning preparation or late evening cleanup, respectively. Average flow from the proposed project will be 11 gallons per minute (gpm) over a 15-hour day. Peak flows to the lift station will be less than 80 gpm for less than 10 minutes based on the known and probable wastewater generation rates of the different components of the proposed project and their likelihood of occurring simultaneously. Peak flows from the proposed project will be equalized by the proposed lift station and peak flows to the local sewer system will be limited to the peak lift station pump flow capacity of 30 gpm.

The proposed 1.37-acre open space site southeast of the intersection of 7th Street and Silvera Avenue will not require sewer services and will not increase estimated wastewater flows for the proposed project.

Project-generated wastewater will not exceed the existing capacity of the sewer delivery system or the existing capacity of the JWPCP. The JWPCP has available capacity (approximately 6 mgd); therefore, the proposed project will not require the construction of new or expanded wastewater treatment facilities. Proposed improvements to the local sewer system will provide sufficient capacity to convey the combined peak flows of existing and proposed project sewage. The increased sewer diameter will mitigate all existing peak-flow problems in Vista Street and provide capacity for the discharge of sewage from the proposed project.

Project impacts related to the provision of wastewater treatment services are considered less than significant. Payment of a connection fee will be required before a permit to connect to existing facilities is issued. In addition, the project will be required to comply with all City of Long Beach, LBWD, and LACSD requirements for design and construction of new sewer infrastructure.

Potentially Significant Impacts

Solid Waste. The proposed project will result in additional solid waste operation during construction and operation of project components. Project construction would involve the demolition and removal of existing on-site tanks, which would generate approximately 11,068 cubic yards of debris.[1] In addition, the proposed project will require the removal of and disposal of approximately 33,500 cubic yards of soil contained in the earthen berms surrounding the storage tanks. The majority of solid waste generated during construction would include scrap metal, fiberglass, soil, and other inert waste. All asbestos-containing materials will be removed by a California State licensed contractor and disposed of in accordance with applicable laws and regulations prior to commencement of other demolition activities. Mitigation related to demolition, grading, excavation, and construction are included in Section 4.6 of this document (Refer to Section 4.6, Hazards and Hazardous Materials, for additional information related to the disposal of hazardous materials and soils potentially contaminated by petroleum hydrocarbons.) Most of the non-hazardous demolition material will be disposed of at unclassified landfills. The unclassified landfills that accept such materials have

[1] Sanitary flow discharge estimate is based on information provided by Greenberg Farrow Architects and the Sewer Flow Study for East Long Beach Home Depot Design Center Development, HDR Engineering, Inc., August 2005.

[1] Assumes 10 percent of the total volume of existing building volume (110.676.89 cu. yd.) is equal to the amount of demolition debris.

sufficient capacity to accommodate the disposal materials that will be generated by demolition of existing on-site structures. Impacts to unclassified landfills due to project implementation will be less than significant.

As shown in Table 4.10.F, project operation will result in approximately 1,000 tons of solid waste per year or approximately 3 tons per day to be committed to Class III landfills or other waste disposal facilities. This represents a less than 0.01 percent increase in the total solid waste disposed of within the City of Long Beach (2002). Solid waste generation resulting from operation of the open space site southeast of the intersection of 7th Street and Silvera Avenue would be minimal; uses do not include waste- generating uses other than grass and plant clippings. Debris from construction and demolition on the open space area will be disposed of at unclassified landfills, which have sufficient capacity to accept waste of this type.

Table 4.10.F: Estimated Solid Waste Disposal for the Proposed Project

	Full-Time Employees	Disposal Rate (tons/employee/year)	Standard Industrial Classification	Solid Waste Disposal (tons per year)
Restaurant	68*	3.1	Restaurant	210.8
Home Depot	225**	3.3	Retail Trade—Building Material and Garden	742.8
Retail	23*	1.9	Retail Trade—Other	43.7
Total	**316**	**—**	**—**	**997**

* Retail and restaurant employee estimates are based on the average of five national studies of square feet per employee conducted by the Urban Land Institute; the San Diego Association of Governments; Portland, Oregon Metro Employment Density Study; City of Mountain View Planning Department; and the Boulder Central Area General Improvement District.
** Home Depot employee estimate is based on staffing levels at other Home Depot stores.
Source: CIWMB, Waste Disposal Rates for Business Types, 2004.

Given the percentage increase of solid waste disposal as a result of project implementation, the regional landfills and SERRF have sufficient short-term capacity to accommodate the additional demand for solid was disposal facilities. SERRF, for example, has a permitted capacity of 2,240 tpd, with an average daily intake of 1,290 tpd. Therefore, project impacts related to permitted solid waste capacity are less than significant.

As previously stated, California State Assembly Bill (AB) 939 requires that every city and county in California implement programs to recycle, reduce refuse at the source, and compost waste to achieve a 50 percent reduction in solid waste being taken to landfills. In order to assist in meeting this goal, the proposed development will be required to incorporate storage and collection of recyclable materials into the project design and to include provisions for the collection of recyclables in refuse collection contracts. Mitigation Measures 4.10.1 and 4.10.2 will assist the City in its effort to meet its waste reduction goals by facilitating recycling on site.

Law Enforcement. The proposed project does not include the construction of new residential units that would generate additional population in the area. The project will generate approximately 316 employees. The nature of the proposed project will also lead to an increase in the number of people visiting the site who may generate additional calls for police services, and there is some concern

about increases in theft, burglaries, and other property-related crimes on site related to the additional patrons and increased opportunities commercial patrons and employees pose for targets. Local residents also expressed concern about loitering and day laborers during the scoping process. The City of Long Beach Police Department recommended that Crime Prevention through Environmental Design (CPTED) guidelines be applied during final site plan refinement to reduce potential increases in demand for police services (Susanne Steiner, Detective, April 12, 2004; Mike Weber, Detective, February 9, 2005).

Although the increase in on-site employees and customers has the potential to result in an increase in calls for police services, the Police Department does not expect existing response times to change with project implementation. The existing response time in the City is, however, 5.2 minutes, which is 0.2 minutes longer than the response time goal of 5 minutes. Therefore, the proposed project will contribute to an existing deficiency. Mitigation Measure 4.10.3 requires implementation of a Security Plan to reduce project impacts to police services. Although implementation of the Security Plan will not alleviate the existing response time deficiency, it will reduce the project's impact on already strained police services by reducing project-related calls for service. With implementation of Mitigation Measure 4.10.3, project impacts related to the provision of police services will be reduced to a less than significant level.

The proposed 1.37-acre open space site southeast of the intersection of 7th Street and Silvera Avenue is not expected to significantly impact police response times or calls for service and will not result in a significant impact to police protection services in the City of Long Beach.

In addition, the project will not require new or physically altered police facilities or 10 or more additional personnel to maintain acceptable service ratios, response times, or performance objectives. The on-site population would be fewer than 1,000 people; therefore, the project would, at most, generate demand for 2.5 officers. The need for additional police services will be addressed through the annual municipal budgeting process. Property and sales taxes generated by the project would provide the City of Long Beach with revenue to address ongoing budget needs.

Mitigation Measures

4.10.1 A Solid Waste Management Plan for the proposed project shall be developed and submitted to the City of Long Beach Environmental Services Bureau for review and approval prior to issuance of grading permits. The plan shall identify methods to promote recycling and reuse of construction materials as well as safe disposal consistent with the policies and programs outlined by the City of Long Beach. The plan shall identify methods of incorporating source reduction and recycling techniques into project construction and operation in compliance with State and local requirements such as those described in Chapter 14 of the California Code of Regulations and AB 939.

4.10.2 Prior to issuance of building permits, the City of Long Beach Director of Planning and Building shall verify that adequate storage space for the collection and loading of recyclable materials has been included in the design of buildings as well as waste collection points throughout the project site to encourage recycling.

4.10.3 The project applicant shall submit a Security Plan for the review and approval of the City of Long Beach Chief of Police and the City of Long Beach Director of Planning and Building prior to the issuance of any building permits. The Security Plan shall incorporate Crime Prevention Through Environmental Design (CPTED) principles and other crime-prevention features that shall include, but not be limited to, the following:

- Interior and exterior security lighting.
- Alarm systems.
- Locking doors for all employee locations.
- Use of vines and other landscaping to discourage graffiti and unauthorized access.
- Bonded security guards.
- "No Loitering" signs posted at various locations throughout the project site.
- Surveillance cameras for each business and all on-site parking areas.
- Surveillance cameras located on site that are capable of thoroughly monitoring Channel View Park, the Vista Street/Loynes Drive intersection, and the Vista Street/Silvera Avenue intersection.

All surveillance cameras shall continuously monitor all on-site and off-site locations on a 24-hour basis, and all surveillance camera video recording equipment shall have a minimum continuous two-week capacity to the satisfaction of the City of Long Beach Chief of Police. The City of Long Beach Director of Planning and Building shall verify inclusion of all required physical public safety improvements prior to issuance of any building permits. All physical requirements in the approved Security Plan shall be installed and fully operational prior to issuance of any Certificate of Occupancy.

4.10.5 CUMULATIVE IMPACTS

Police Protection

The geographic area for cumulative analysis of police protection services is defined as the service territory for the LBPD. A net increase of up to approximately 56,827 residents and 29,428 jobs is forecast for the City by 2020.[1] These growth projections are generated by the SCAG using the latest census data, local input, and historical growth trends and reflect reasonably foreseeable developments and growth.

Cumulative projects will likely include specific features designed to reduce impacts on police protection services and may be assessed additional mitigation measures specific to the given project's impacts as crime prevention design is implemented through the CPTED program and the TAC review process required for all new development projects. The need for additional police protection services associated with cumulative growth will be addressed through the annual budgeting process, when

[1] The change in the number of residents and jobs was measured using 2000 baseline population and employment numbers as reported in Southern California Association of Governments, RTP Growth Forecast, City Projections 2001.

budget adjustments may be made to meet changes in service demand. Property and sales taxes generated by the project would provide the City of Long Beach significant annual revenues to address these ongoing budget needs. Therefore, the combined cumulative impact associated with the project's incremental effect and the effects of other projects in the area is considered less than significant.

Fire Protection

Similar to the cumulative analysis area for police protection services, the geographic area for cumulative analysis of fire protection services is defined as the service territory for the Long Beach Fire Department. As stated above, a net increase of up to approximately 57,000 residents and 29,000 jobs is forecast for the City by 2020.[1] The proposed project, however, will not result in a significant demand for additional fire protection and emergency medical services.

As stated above, the Long Beach Fire Department confirmed that the project could be accommodated with adequate fire protection and emergency medical services. The Fire Department anticipates cumulative demand in order to plan for overall service. As with police services, annual budget adjustments may be made to address Citywide increases in demand for fire and emergency services. The project's contribution to the City's annual budget through payment of fees and taxes can be used to address ongoing changes in demand for fire and emergency services. Therefore, the Fire Department's determination that adequate service can be provided includes consideration of area demand in light of cumulative planned or anticipated projects. The proposed project will not generate a significant cumulative increase in demand for fire protection and emergency medical services.

Natural Gas

The geographic area for the cumulative analysis of impacts to the provision of natural gas is the service territory for LBE. As stated above, development of the proposed project will generate a demand for approximately 462,779 cubic feet of natural gas per month. This will account for approximately 0.01 percent of LBE's total daily delivery capacity. Sufficient gas supplies and infrastructure capacity are available, or have already been planned, to serve the project and future development. Further, all future projects will be subject to Title 24 requirements and will be evaluated on a case-by-case basis to determine the need for specific distribution infrastructure improvements. The proposed project does not contribute to a significant cumulative impact associated with the provision of natural gas and natural gas delivery capacity.

Electricity

The geographic area for the cumulative analysis of impacts to the provision of electricity is the service territory for SCE in the City of Long Beach. SCE, the electricity provider for the proposed project site, has confirmed that the project could be accommodated with adequate service to meet the projected service demand of the project site. There may be a need to pull cables to proposed structures on the project site; however, this will not result in long-term service disruption to

[1] The change in the number of residents and jobs was measured using 2000 baseline population and employment numbers as reported in Southern California Association of Governments, RTP Growth Forecast, City Projections 2001.

surrounding areas. Furthermore, such improvements will not prevent service extensions to future developments. Therefore, the proposed project, in relation to the cumulative study area, would not generate a significant cumulative increase in demand for electricity or a significant disruption in service or service level.

Water

The geographic area for the cumulative analysis for the supply of potable water is defined as the LBWD service territory. Although the proposed project and future planned development projects may increase demand for potable water, the LBWD has sufficient water supplies to accommodate the growth and may also exercise its right to supplement current supplies with additional water from the MWD. Therefore, no significant cumulative impacts on potable water services are expected to occur as a result of project implementation.

Sewer

The geographic area for the cumulative analysis for sewer treatment is defined as the LACSD service territory. Within its service area, the LACSD uses SCAG forecasts for future population and employment growth to project needed capacity. Because the LACSD projects that its existing and programmed wastewater treatment capacity will be sufficient to accommodate the growth forecasted by SCAG within its service area, development that is generally consistent with this forecast can be adequately served by LACSD facilities. The proposed project falls within the forecasted employment growth for the City of Long Beach and the County of Los Angeles and can be accommodated in planned expansion of sewerage services. Therefore, the proposed project will not contribute to a significant cumulative impact to wastewater services.

Solid Waste

Development associated with future projects in the City of Long Beach will contribute to increased demand for landfill capacity for solid waste from construction activities and operations. Unclassified landfills that accept inert waste (construction debris) face no capacity shortfall.

There is, however, insufficient permitted capacity within the existing system serving Los Angeles County to provide for long-term nonhazardous solid waste disposal needs. Since the late 1980s, the Sanitation Districts, in conjunction with other public agencies, have been studying means to address the projected shortfall in local solid waste disposal capacity. Rail transport is considered an efficient means to transport refuse to remote disposal sites, thereby increasing the solid waste disposal capacity for Los Angeles County. This concept of rail transport of refuse, which includes an integrated system of local and remote infrastructure, is called “waste-by-rail.” Within California, there are two landfills that are designed and permitted to receive waste-by-rail: the Mesquite Regional Landfill in Imperial County and the Eagle Mountain Landfill in Riverside County. In August 2000, the LACSD entered into purchase agreements for both landfills. Both sites are located approximately 200 miles east of Los Angeles along the Union Pacific Railroad. The Mesquite Regional Landfill is fully permitted to accept residual waste-by-rail, and the Sanitation Districts expect the landfill to be in operation by the end of 2008. The Eagle Mountain Landfill is fully permitted to receive waste; however, the purchase

of the Eagle Mountain Landfill by the Sanitation Districts and its eventual operation is contingent upon successful resolution of pending federal litigation.

The waste-by-rail system is also contingent upon the permitting and construction of a dedicated intermodal yard where refuse would be unloaded from trucks and containerized for rail transport. LACSD is pursuing construction of an intermodal yard near the Puente Hills MRF to facilitate loading rail-capable containers for refuse transportation. The intermodal facility would be designed to handle up to two trains per day, or approximately 8,000 tons per day of refuse. The intermodal containers would be transported to one of these landfills, where the waste would be unloaded and disposed of.

Although the project's contribution is not the sole cause of the shortfall, when coupled with solid waste generated by future projects, the impact to solid waste disposal capacity is cumulatively significant. For CEQA purposes, the project's impacts on solid waste disposal capacity in Los Angeles County remain significant until the Mesquite Regional Landfill or the Eagle Mountain Landfill become fully operational and able to accept waste-by-rail from Los Angeles County. As previously stated, Mitigation Measures 4.10.1 and 4.10.2 will assist the City in its effort to meet waste-reduction goals; however, even with recycling, additional regional long-term disposal capacity is needed to accommodate new developments. Due to the existing deficiency in long-term waste disposal capacity, cumulative solid waste project impacts will remain significant.

4.10.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of Mitigation Measures 4.10.1 and 4.10.2 will assist the City in its effort to meet waste-reduction goals. Project impacts related to compliance with federal, State, and local status and regulations for solid waste will be reduced to a less than significant level. The project may, however, result in potentially significant cumulative impact to solid waste disposal capacity in the County of Los Angeles. Implementation of the above-mentioned mitigation measures will facilitate recycling of solid waste generated by project site land uses to the extent feasible. However, because there is an existing identified long-term capacity shortfall at waste disposal facilities in Los Angeles County, cumulative project impacts associated with solid waste disposal capacity at Class III landfills will remain significant and unavoidable. For CEQA purposes, the project's impacts on solid waste disposal capacity in Los Angeles County remain significant until the Mesquite Regional Landfill, the Eagle Mountain Landfill, or another waste disposal facility becomes fully operational and able to accept waste from Los Angeles County.

Implementation of Mitigation Measure 4.10.3 will reduce project impacts on police services to a less than significant level. The required security plan will reduce calls for service originating on the site and minimize project impacts to police response times.

All other potential impacts associated with the proposed project are less than significant and do not require mitigation.